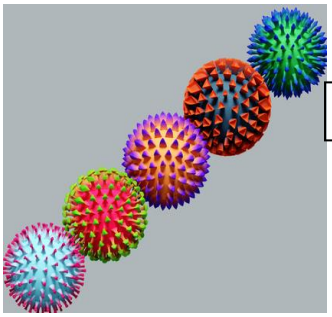
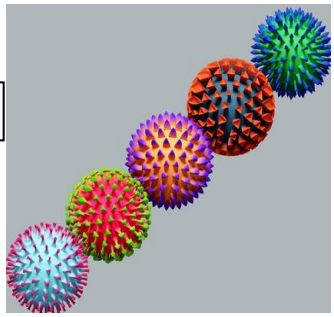
Annual Report : 2022-2023

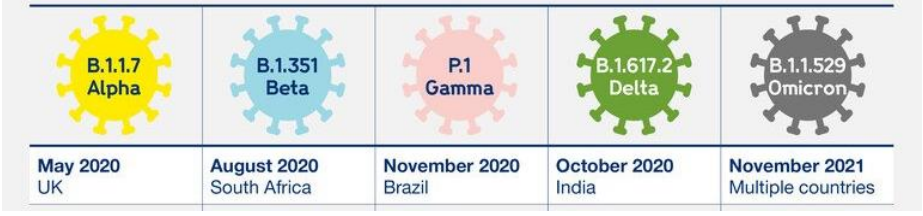


Research at Deenanath Mangeshkar Hospital and Research Centre



Research Department, 14th Floor, Wing C, Super-specialty building, Deenanath Mangeshkar Hospital and Research Centre, Erandawane, Pune 411004, Maharashtra, India.
Phone- (020) - 4915 4456 - 62
http://www.dmhospital.org/research-aboutus

Coronavirus [SARS-CoV-2] - Variants Of Concern [Source – WHO]



DEENANATH MANGESHKAR HOSPITAL AND RESEARCH CENTRE, PUNE, M.S., INDIA

PATRON, SUPPORT and DIRECTOR

Dr. Dhananjay S. Kelkar

ANNUAL REPORT 2022-23 – CONTRIBUTIONS

- *Dr. Vaijayanti V. Pethe*
Content and design

- *Dr. Shweta A. Chitharanjan*
Data compilation – Clinical Trial research program

- *Dr. Amrita P. Prayag*
Data compilation – In-house research program and PharmD thesis projects

- *Mr. Raju S. Sawale, Department of Academics*
Data compilation – DNB research program
[The data was requested from the Department of Academics]

- *Dr. Deepchand H. Agre*
List of publications [includes original articles, case reports/series, clinical communication /editorial, reviews (systematic/narrative/literature), survey studies, clinical trial results]

Source: WHO and PAHO

WHO and World health day **2022 theme**
Each year, 7th of April is celebrated as the world health day.

Each year for this day, a theme is chosen that highlights an area of priority concern for WHO. In the face of the current pandemic, a polluted planet and an increasing incidence of diseases, the theme of World Health Day for 2022 was **"Our planet, our health"**

The research recap for 2022-23

Adhering to our patient care mission through scientific research in human maladies

Life science research offers huge benefits and is crucial for advancements in medicine and public healthcare. We believe that cutting-edge scientific research and accurate information derived through it are crucial in furthering our knowledge of why diseases exist, their etiology, mechanisms, manifestations, appropriate management and developing treatments. Considering the recent past, Covid-19 pandemic situation serves to be an exemplary in this space. In the era of evidence-informed and precision medicine – and with commitment to patient centricity – our research consultants focus on disease-centric clinical trials and biomedical health research across a broad range of therapeutic areas encompassing highly prevalent and rare conditions.

I am pleased to release the 2022-23 research report. The communiqué recounts our research proceedings and achievements during the, yet another, pandemic year. Akin to our earlier reports, the content is organized around the key themes of our mandatory registrations, accreditations, the investigator-initiated and sponsored research that was undertaken covering a slew of therapeutic areas. As well, upholding the academic integrity, our DNB faculty zeroed in on – and guided diverse DNB research projects, which have also been delineated in the report. As evident from the information provided, our clinicians, students and staff gave their best adhering to our integrated mission areas of patient care, education and research. The report aims to provide a forum to showcase the broad contributions of our researchers to conceptual, mechanistic and practical knowledge – for advancements in science and medical practice – with a potential to better predict and monitor patient responses. The consultants continued to research, test and learn about the afflictions in their area of specialty that culminated into publications, locally and internationally, across system organ classes.

Our sincere thanks and acknowledgements:
As always, we wish to earnestly thank and appreciate the efforts and time of many individuals who have contributed to this report including various clinical department heads, coordinators, clinical fellows, administrators, and of note, research consultants.

We wish the readership a safe 2023!

Dr. Vaijayanti V. Pethe
Assistant Director, Research
Department of Research
Deenanath Mangeshkar Hospital and Research Center
Pune, Maharashtra, India
www.dmhospital.org

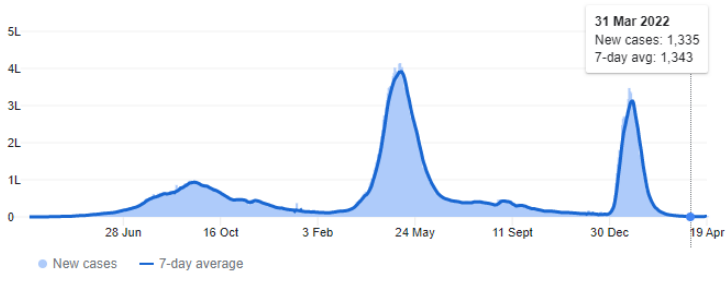
"*Leading the way to the future of personalized medicine through meticulous health research – and best practices at DMHRC"*

Nanotechnology Is Changing The Healthcare Industry – nanomedicine, nanobots, nanofibers, nanotech-based wearables.

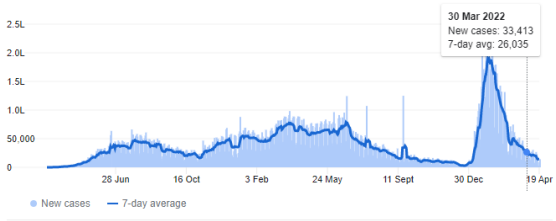
The constant in an inconstant and unsettled world : the coronavirus and its variants
[April 2021- March 2022]
(Also available in our 2021-2022 report)

Daily new Covid cases reported – The US, India, Brazil, France, Germany and The UK (Source - JHU-CSSE data – 2021-2022).

The US



India



Brazil

France

Germany

The UK

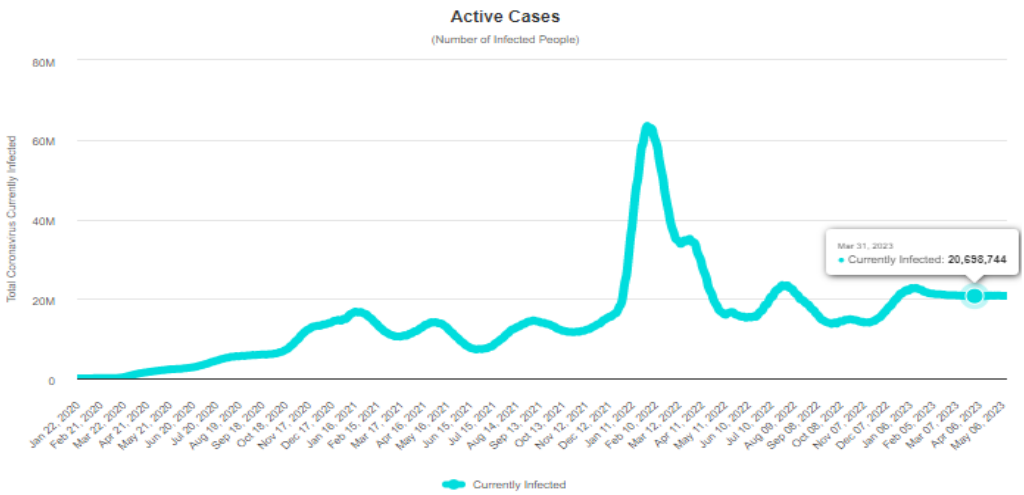
Please make sure to get your shots and the booster doses

The constant in an inconstant and unsettled world : the coronavirus and its variants

Covid by the numbers [April 2022 – March 2023]

Source: JHU-CSSE data 2022-23: Active Covid cases (N - Number of infected people)

Country	**N [As of 1 April 2022]**	**N [As of 31 March 2023]**
USA	1, 561, 998	1, 075, 372
India	10, 767	15, 208
Brazil	575, 413	309, 263
France	2, 309, 616	143, 477
Germany	4, 575, 633	109, 003
The UK	2, 019, 961	44, 424
Japan	441, 767	11, 663, 096
S. Korea	6, 509, 596	175, 021
Italy	1, 306, 932	138, 599
Russia	608, 240	245, 783
Global cases :	34, 153, 126	20, 698,744



Please make sure to get your shots and the booster doses

OUR MISSION –

Our mission is to promote scientifically sound and ethical health research in the best interest of patient care.

OUR VISION –

Our vision is to advocate and deliver health research to high degree of merit and quality for the benefit of patients at large.

DEPARTMENTAL ORGANIZATION

OUR LEADERSHIP –

RESEARCH OPERATION AND PRIORITIES

Patron, support and Director [HOI] – Dr. Dhananjay S. Kelkar (2001)

Assistant Director, Research – Dr. Vaijayanti V. Pethe (2013)

In-charge, Clinical trial research program (CTR) – Dr. Shweta A. Chitharanjan (2002)

In-charge, In-house research program [IHR, Regulation] – Dr Amrita P. Prayag (2018)

OUR STAFF –

Dr Deepali Patil, (Clinical Research Coordinator, 2015)
Dr Tejashree Patole, (Clinical Research Coordinator, 2017)
Mrs Shilpa Hayatnagarkar (Clinical Research Coordinator, 2021)
Dr Deepchand Agre (IHR, Research Associate, 2021)
Mrs Varada Bivalkar (Clinical Research Coordinator, 2022)
Dr Prachi Puntambekar (Jr Clinical Research Coordinator, 2022)
Ms Manasi Bakale (Jr Clinical Research Coordinator, 2022)
Ms Gauri Pandhure (CRC trainee, 2022)
Ms Harshada Gaurkhede (Jr Clinical Research Coordinator, 2022)
Ms Mrunali Keskar (Jr Clinical Research Coordinator, 2022)
Mr. SN Shreyaan (Jr Clinical Research Coordinator, 2023)
Mr Sandeep Bhosale (Multi-Purpose Worker, 2007)

INTERNS (CTR ARM) –

Pranay Kokate– Harshada Bembre – Pooja Shete – Vaishnavi Shinde – Kalpashree Deval – Snehal Albhar – Shreya Tambe – Shivani Jadhav – Anushree Mulay – Bhakti Takawale – Anamika Gavhar – Priti Nirgudkar – Priyanka Ingole – Apurva Dixit – Bhavana Tadakhe

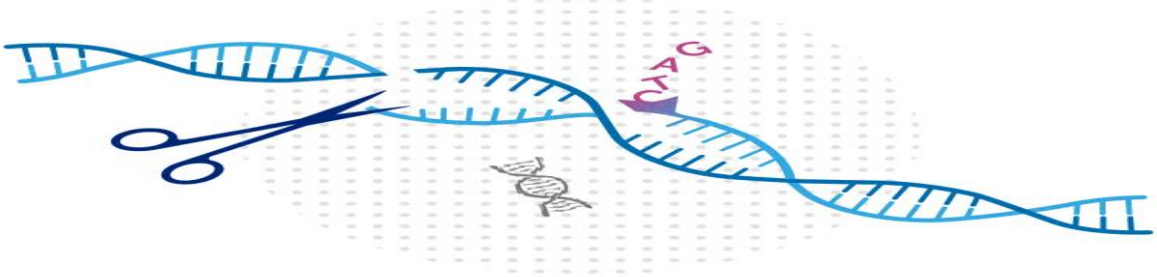
ALUMNI - CRCS AND INTERNS (CTR ARM) –

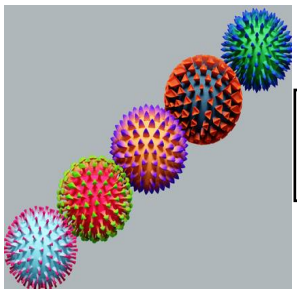
Dr Asmita Shembekar – Dr Smita Sawant – Dr Kirti Jalkote – Mrs Snehal Jadhav – Madhura Shirolkar – Tanuja Deshmukh – Prerna Kulkarni – Kajal Tripathi – Manisha Ghumatkar – Kanchan Khedkar – Shrutika Ghodekar – Kajal Tripathi – Vrushali Sawant – Mayuri Patil – Puja Shirsat – Arti Chavan – Komal Choudhari – Harshada Kudale – Akanksha Kale – Roschelle Alex – Dr Manasi Satam

Researchers have developed a new technology called long-read sequencing that helps for reading longer, more difficult stretches of DNA. During the Human Genome Project (1990-2003), researchers could only read 500 bases at a time. Now, they can read up to 100,000! [Source – NHGRI, Bethesda, 2023]

CONTENT

OUR RESARCH PROGRAMS





Our Registrations / Accreditations

OUR REGISTRATIONS/ACCREDITATIONS FOR CLINICAL RESEARCH – IN-HOUSE RESEARCH, CLINICAL TRIAL RESEARCH – AND DNB RESEARCH PROGRAMS

IN-HOUSE RESEARCH PROGRAM – Biomedical and Health Research

A] We are granted SIRO recognition from DSIR, New Delhi

Registration validity: 1st of April 2023 through 31st of March 2026.

B] Ethics Committee (BMHR) is registered with Department of Health Research, ICMR, New Delhi

Registration validity: For 5 years starting 30th of November 2021

CLINICAL TRIAL RESEARCH PROGRAM –

A] EC registration from DCGI (CDSCO, New Delhi)

Registration validity : 1st of April 2022 through 31st of March 2027
[Re-Registration number – ECR/15/Inst/Maha/2013/RR-22]

B] The Ethics Committee of DMHRC has been granted accreditation from NABH –

Accreditation validity : 21st of January 2021 through 20th of January 2024

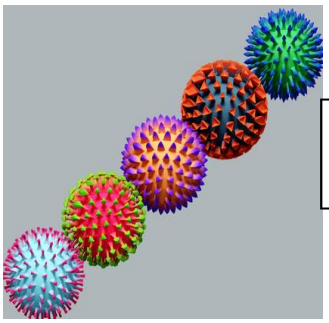
DNB RESEARCH PROGRAM –

25 Clinical departments at DMH have been accredited by National Board of Examinations, New Delhi

[Broad Speciality – 11, Super Speciality – 11, Fellowship – 03]

The list of departments is included in SOP – BMHR document.

(The data on research projects was requested from the Department of Academics, DMH)



Selected publications

SELECTED PUBLICATIONS – APRIL 1, 2022 – MARCH 31, 2023

1. Prayag PS, Patwardhan SA, Panchakshari SP, Prayag AP. (March 2023)
   Clostridium difficile in Oncology Patients—Review of Diagnosis and Management in the Indian Setting.
   Indian Journal of Medical and Paediatric Oncology.

   Abstract
   Clostridoides (formerly *Clostridium*) *difficile* (*C. difficile*) is a toxin-producing, gram-positive anaerobic bacillus, commonly implicated in antibiotic-associated diarrhea and pseudomembranous colitis. The true burden of *C. difficile* infection is unclear in India, as it is likely underdiagnosed and underreported. Its incidence is much higher in oncology patients where it can contribute significantly to morbidity and mortality. There are several challenges in the Indian setting, including lack of uniform availability of testing infrastructure, as well as therapy. Oncology patients further present with a unique set of challenges. This article will review the approach to diagnosis and management of *C. difficile*-associated diarrhea in India, with a focus on oncology patients.

2. Kakkar B, Melinkeri S, Narawade S, Ketkar S, Kulkarni S. (March 2023)
   Hemolysis during therapeutic plasma exchange: A rare phenomena.

   Transfus Med. doi: 10.1111/tme.12958. Epub ahead of print. PMID: 36858361.
   Abstract
   Hemolysis is an uncommon complication in patients undergoing therapeutic plasma exchange (TPE) using cell separator machine based on continuous centrifugation method. However, it is frequently encountered in patients undergoing TPE using a membrane filtration technique. We report an interesting case where hemolysis was noted during TPE using a cell separator machine.

3. Shrigiriwar A, Zhang LY, Ghandour B, Bejjani M, Mony S, **Bapaye A**, Khashab MA. (March 2023)
   Technical details and outcomes of peroral endoscopic myotomy with fundoplication: the first U.S. experience (with video).

   Gastrointest Endosc. 97(3):585-593. doi: 10.1016/j.gie.2022.10.027. Epub 2022 Oct 18. PMID: 36265528.
   Abstract
   Background and aims: Peroral endoscopic myotomy (POEM) is an established endoscopic treatment for achalasia; however, post-POEM rates of GERD remain a significant cause of concern. Single-session POEM with fundoplication (POEM-F) to treat achalasia was recently described to reduce post-POEM GERD. This study aims to report the technical feasibility, safety, and early outcomes of the first U.S. cohort of POEM-F.
   Methods: We retrospectively reviewed all patients with achalasia treated with POEM-F at our center. The primary endpoint was technical success, defined as the successful completion of all steps of the POEM-F procedure.
   Results: Six patients (mean age, 50 ± 4.8 years; 1 woman) underwent POEM-F for achalasia. Technical success was achieved in all patients (6/6), and no major immediate or delayed (up to 30 days postprocedure) adverse events were seen. At the 1-month follow-up visit, the mean Eckardt

score decreased from 8.8 ± 1.1 to .3 ± .5. The GERD health-related quality of life and reflux symptom index scores obtained at the 1-month follow-up, with patients on proton pump inhibitors, were 2.3 ± 3.7 and 2.2 ± 2.5, respectively.
Conclusions: This first case series on POEM-F in the United States suggests that POEM-F is feasible and safe with excellent short-term outcomes.

4. **Jagtap SA**, Deshmukh Y, **Joshi A, Patil S, Kurwale N, Nilegaonkar S**. (March 2023)
Epilepsia partialis continua (EPC) and unilateral cortical-subcortical FLAIR-hyperintense Lesion in Rasmussen's Encephalitis: is it diagnostic?.

Epileptic Disord. doi: 10.1002/epd2.20033. Epub ahead of print. PMID: 36939721.
Abstract
Objective: Rasmussen encephalitis (RE) is a focal encephalitis, characterised by epilepsia partialis continua (EPC) with or without seizures and progressive unilateral deficits. Imaging characteristics of RE has been rarely described in detail in relation with EPC. So, the study aimed to explore if any relationship exists between the imaging characteristics and the presence or evolution of EPC in patients with RE.
Methods: This retrospective study included eleven patients with RE fulfilling the European consensus statement on RE followed between 2015 and 2020.
Results: The mean age for onset of seizures was 12 years (range 2.5 -24 years). Seven patients had limb EPCs, two had face EPCs, face and limb EPC in one and lingual EPC in one patient. The first MRI was done within one day to one month of onset of seizures. It was normal in two patients, and showed only cortical atrophy, focal or hemispheric in four patients, caudate atrophy in two, and cortical or subcortical hyperintensity (HI) in six patients. Follow up MRI, within 3 weeks to 6 months of onset of EPC (mean 1.6 month) showed paramedian frontal HI with limb EPC in six patients. Insular HI in four patients; two had facial EPCs while lingual EPC and limb EPC with facial EPC was observed in one patient each.
Significance: FLAIR HI and focal cortical atrophy on MRI is most common finding in early course of RE. T2 and FLAIR hyper intensity in the paramedian frontal or insular cortex may antedate the onset of EPC or may occur simultaneously with EPC.

5. **Waghela AB**, Oka GA, **Ranade AS**. (March 2023)
Submuscular nonlocking plates: an effective option for pediatric extra-articular proximal femur fractures.

J Pediatr Orthop B. doi: 10.1097/BPB.0000000000001076. Epub ahead of print. PMID: 36943677.
Abstract
The aim of this study is to evaluate the results of submuscular plating using nonlocking plates for extra-articular proximal femur fractures (EPFF) in children. From our hospital records, we retrieved data of 15 children treated with submuscular plating with nonlocking dynamic compression plates (DCP) for EPFF between January 2010 and September 2021. EPFF was defined as a proximal femur fracture within 10% of the femoral length below the lesser trochanter. Patients' demographics, as well as details of the duration of operation, type of DCP used, time to union, complications, and outcomes using Flynn criteria were noted. There were nine males and six females. Mean age of the patients was 10.8 ± 1.9 years (range 7-14 years). All the patients had fracture union and two patients had union with an angulation less than 10°. All fractures healed uneventfully with a mean time to union of 11.8 ± 1.2 weeks (range 10-15 weeks). No patient required surgery for complications or malunion. Using Flynn criteria, excellent outcomes were seen

in 13 out of 15 patients. There were no poor outcomes. Our study shows that submuscular plating using nonlocking plates is an effective option for treating pediatric EPFF. Treatment of these tricky fractures with submuscular plating using nonlocking plates shows excellent outcomes with minimal complications.

6. **Prayag P,** Gupta N, Porwal R, Rao P V. (March 2023)
   Management of invasive mold infections: An Indian perspective review.

   J Prim Care Spec [Epub ahead of print]. Available from: https://www.jpcsonline.org/preprintarticle.asp?id=372788
   Abstract
   Invasive mold infections (IMIs) are a major cause of morbidity and mortality in hospitalized and immunocompromised patients. Over the last decade, the incidence of IMIs has increased at an alarming rate in India. Radiology, histopathology, and validated biomarkers play an important role in the diagnosis of IMIs, including aspergillosis and mucormycosis. Despite major advances in the field of diagnostics, newer diagnostic aids are not available in India. Further, the cost is a major consideration in the Indian context. While antifungal therapies are the mainstay of treatment for aspergillosis, surgery along with antifungal therapy is the mainstay treatment for patients with mucormycosis. Furthermore, there is a paucity of data regarding the diagnosis and management of IMIs, especially in India. This study presents an expert opinion on the diagnosis and management of IMIs in Indian settings. The key opinions proposed by the subject expert group are summarized in this paper.

7. **Suryawanshi M, Saindani S, Suryawanshi R,** Bhatta S**, Bhola G.** (March 2023)
   Paranasal Sinus Malignant Peripheral Nerve Sheath Tumour: A Rare Case Report.

   Indian Journal of Otolaryngology and Head & Neck Surgery. 1-3.
   Abstract
   Malignant Peripheral Nerve Sheath Tumour (MPNST) is a neoplastic lesion rarely reported in literature. In approximately 5% of cases it is associated with Neurofibromatosis type 1 syndrome. Pathognomic features of MPNST include slow growth rate, aggressive nature, nearly circumscribed, unencapsulated arising from non myelinated Schwann cells. In this case report we elaborate probable molecular pathogenesis, clinical features, histopathology (HPE) and radiological findings in a unique case of MPNST. A 52 year old female patient presented with Right cheek swelling, Loss of sensations over right maxillary region, U/L nasal obstruction and watery nasal discharge, palatal buldge and intermittent pain over right maxillary region and generalised headache. Following Magnetic resonance imaging studies (MRI scan) of paranasal sinuses, Biopsy was taken from maxillary mass and palatal swelling. HPE report was suggestive of Spindle cell proliferation against myxoid stroma. Positron Emmision Tomography (PET-Scan) was done and Biopsy specimen was subjected for Immunohistochemistry staining (IHC). After confirmation of MPNST on IHC, patient was referred to skull base surgeon for complete excision of the tumour and reconstruction.

8. Kaur S, Larsen E, Harper J, **Purandare B**, Uluer A, Hasdianda MA, Umale N, Killeen J, Castillo E, Jariwala S. (February 2023)
   Development and validation of a respiratory-responsive vocal biomarker-based tool for generalizable detection of respiratory impairment: independent case-control studies in multiple respiratory conditions including asthma, chronic obstructive pulmonary disease, and COVID-19.

J Med Internet Res. doi: 10.2196/44410. Epub ahead of print. PMID: 36881540.

Abstract

Background: Vocal biomarker-based machine learning approaches have shown promising results in detecting various health conditions, including respiratory diseases such as asthma. In this study, we aim to validate a respiratory-responsive vocal-biomarker (RRVB) platform initially trained on an asthma and healthy volunteer dataset for its ability to differentiate, without modification, active COVID-19 infection vs. healthy volunteers in patients presenting to hospitals in the US and India.

Objective: The objective of this study was to determine whether the RRVB model can differentiate patients with active COVID-19 infection vs. asymptomatic healthy volunteers by assessing its sensitivity, specificity, and odds ratio. Another objective was to evaluate whether the RRVB model outputs correlate with symptom severity in COVID-19.

Methods: A logistic regression model using a weighted sum of voice acoustic features was previously trained and validated on a dataset of about 1,700 patients with a confirmed asthma diagnosis vs. a similar number of healthy controls. The same model has shown generalizability to patients with chronic obstructive pulmonary disease (COPD), interstitial lung disease (ILD), and cough. In the present study, a total of 497 participants (46% male, 54% female; 94% < 65 years, 6% >= 65 years; 51% Marathi, 45% English, 5% Spanish speakers) were enrolled across four clinical sites in US and India and provided voice samples and symptom reports on their personal smartphones. The participants included symptomatic COVID-19 positive and negative patients as well as asymptomatic healthy volunteers. The RRVB model performance was assessed by comparison with clinical diagnosis of COVID-19 confirmed by RT-PCR.

Results: The RRVB model's ability to differentiate patients with respiratory conditions vs. healthy controls was previously demonstrated on validation data in asthma, COPD, ILD and cough with odds ratios of 4.3, 9.1, 3.1, and 3.9 respectively. The same RRVB model in the present study in COVID-19 performed with a sensitivity of 73.2%, specificity of 62.9%, and odds ratio of 4.64 ($p<0.0001$). Patients experiencing respiratory symptoms were detected more frequently than those not experiencing respiratory symptoms and completely asymptomatic patients (78.4% vs. 67.4% vs. 68.0%).

Conclusions: The RRVB model has shown good generalizability across respiratory conditions, geographies, and language. Results in COVID-19 demonstrate its meaningful potential to serve as a pre-screening tool for identifying subjects at risk for COVID-19 infection in combination with temperature and symptom reports. Although not a COVID-19 test, these results suggest that the RRVB model could encourage targeted testing. Moreover, the generalizability of this model for detecting respiratory symptoms across different linguistic and geographic contexts suggests a potential path to development and validation of voice-based tools for broader disease surveillance and monitoring applications in the future.

9. Ajmera P, Onkar P, **Desai S**, Pant R, Seth J, Gupte T, Kulkarni V, Kharat A, Passi N, Khaladkar S, Kulkarni VM. (February 2023)

   Validation of a Deep Learning Model for Detecting Chest Pathologies from Digital Chest Radiographs.

   Diagnostics (Basel). 13(3):557. doi: 10.3390/diagnostics13030557. PMID: 36766661; PMCID: PMC9914339.

   Abstract

   Purpose: Manual interpretation of chest radiographs is a challenging task and is prone to errors. An automated system capable of categorizing chest radiographs based on the pathologies identified could aid in the timely and efficient diagnosis of chest pathologies.

Method: For this retrospective study, 4476 chest radiographs were collected between January and April 2021 from two tertiary care hospitals. Three expert radiologists established the ground truth, and all radiographs were analyzed using a deep-learning AI model to detect suspicious ROIs in the lungs, pleura, and cardiac regions. Three test readers (different from the radiologists who established the ground truth) independently reviewed all radiographs in two sessions (unaided and AI-aided mode) with a washout period of one month.
Results: The model demonstrated an aggregate AUROC of 91.2% and a sensitivity of 88.4% in detecting suspicious ROIs in the lungs, pleura, and cardiac regions. These results outperform unaided human readers, who achieved an aggregate AUROC of 84.2% and sensitivity of 74.5% for the same task. When using AI, the aided readers obtained an aggregate AUROC of 87.9% and a sensitivity of 85.1%. The average time taken by the test readers to read a chest radiograph decreased by 21% ($p < 0.01$) when using AI.
Conclusion: The model outperformed all three human readers and demonstrated high AUROC and sensitivity across two independent datasets. When compared to unaided interpretations, AI-aided interpretations were associated with significant improvements in reader performance and chest radiograph interpretation time.

10. **Hingmire S**, Tshomo U, Dendrup T, Patel A, Parikh P. (February 2023)
    Cervical Cancer HPV Vaccination and Bhutan. South Asian J Cancer. 12(1):41-43 No abstract available.
11. Parikh PM, Mullapally SK, **Hingmire S**, Kamal Uddin AFM, Thinn MM, Shahi A, Tshomo U, Mohan I, Kaur S, Ghadyalpatil N. (February 2023)
    Cervical Cancer in SAARC Countries. South Asian J Cancer. 12(1):001-008. doi: 10.1055/s-0043-1764227.

    Abstract

    In the year 2020, a total of 342 000 women were estimated to die of cervical cancer, of which 90%) were expected amongst low- and middle-income countries (LMIC). Globally incidence of cervical cancer has reduced as a result of improved personal hygiene, better living conditions and higher application of opportunistic screening programs. Yet GLOBOCAN shows that absolute number of cases are still increasing. We therefore conducted a 21 question multiple choice questionnaire online survey in Jan 2023 amongst 9 SAARC countries. A total of 367 replies were received and the representative answers for each country are being reported in this manuscript. A good possibility of achieving World Health Assembly target (Nov 17, 2020) was felt only by Bhutan and Nepal. For screening, most countries (Bhutan, India, Myanmar, Nepal, Pakistan and Sri Lanka) recommend for all asymptomatic eligible patients. Public health experts have suggested VIA / VILI as the best solution for LMICs. However, a dual screening strategy (HPV DNA plus) cytology was preferred by doctors in Afghanistan, Bhutan, India, Myanmar, Pakistan and Sri Lanka. Screening, triage and then treatment was the preferred by Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka. HPV vaccination was recommended in all girls between ages 10 to 26 years in Bangladesh, India, Myanmar, Nepal, Pakistan and Sri Lanka. All the 9 countries would use HPV vaccination to all eligible patients if the cost of the vaccine was reasonably low. Our survey clearly outlines challenges faced in tackling cervical cancer in SAARC countries. We also provide consensus regarding several potential solutions that can be used in both public and private cervical cancer control programs.
12. Gandhi S, Ganesuni D, Shenoy SS, Bhatta S, Ghanpur AD. (February 2023)
    Arytenoid granuloma: a single-institution experience of management of 62 cases.

    J Laryngol Otol. 137(2):186-191. DOI: 10.1017/S0022215121003662

Abstract: Objective: This retrospective study was undertaken to assess the outcome of the medical and/or surgical management of patients presenting with clinical features of arytenoid granuloma.
Methods: The records of 53 males and 9 females were reviewed for predisposing factors, types of treatment received and recurrence following the treatment.
Results: Most of the patients (48 out of 62, 77.4 per cent) were treated conservatively with medical management and voice therapy, which resulted in complete resolution of arytenoid granuloma in over two-thirds of the patients treated (32 out of 48, 66.6 per cent). Overall, 28 patients (out of 62, 45.1 per cent) required surgery (14 failed medical treatment cases and 14 surgery as first-line treatment cases). Of these, five patients (out of 28, 17.9 per cent) had recurrence, and were managed with revision surgery and concurrent local injection of Botox.
Conclusion: Anti-reflux medication and voice therapy are effective first-line management options. Pre- and post-surgery adjuvant treatment improves the results of surgery. Local injection of Botox was successful in the treatment of failed surgical cases.

13. Naik S, Saraf S, Ghodki P, Bapat S. (February 2023)

Evolution of anaesthesia technique for endolaryngeal surgery through and post-COVID-19 pandemic: An experience from a tertiary referral centre for airway surgery. Indian Journal of Anaesthesia. 67(Suppl 1):S29-34. DOI: 10.4103/ija.ija_1057_22

Abstract
Background and Aims:
Anaesthesia for endolaryngeal surgery is specialised to provide almost a tubeless surgical field. During the coronavirus disease-19 pandemic, when most of the surgeries were staggered, we being in a tertiary referral centre for airway surgery had to modify our existing techniques and observed an evolution in the anaesthesia management which we could continue even in the postpandemic period. Hence, we conducted this retrospective study to analyse the reliability of our locally developed apnoeic high-flow oxygenation technique (AHFO) for endolaryngeal procedures.
Methods:
We conducted this single-centric retrospective study from January 2020 to August 2021 to observe the choice of airway management techniques in endolaryngeal surgery and assess the feasibility and safety of AHFO. We also intend to propose an algorithm for airway management. We calculated the percentages of all necessary parameters to denote the trend in change of practices roughly classifying the study period as prepandemic, pandemic and postpandemic.
Results:
A total of 413 patients were analysed in our study. The changing trend over preference of AHFO from prepandemic (72%) and dominance of AHFO (92.5%) in the postpandemic period are the most significant observations of our study with 17% patients needing conversion to tube in-tube out technique due to desaturation which is comparable to 14% in prepandemic period.
Conclusion:
The tubeless field provided by AHFO replaced the conventional airway management techniques. Our study demonstrates the safety and feasibility of AHFO for endolaryngeal surgeries. We also propose an algorithm for anaesthetists involved in laryngology unit.

14. Balushi F, Puneeth PJ , Gandhi S. (February 2023)

Vocal Cord Melanosis: To Worry or Not to Worry?.

Indian Journal of Otolaryngology and Head & Neck Surgery. 1-3.

Abstract
Laryngeal Melanosis is a rare entity with unclear significance: whether it is a premalignant lesion for squamous cell carcinoma of the larynx or a sign of mucosal melanoma. In the few reported cases

in the literature, it is descried as localised/diffused brownish discoloration of the mucosal surface of the involved subsite of the larynx. We hereby report a raised localised laryngeal melanosis of the vocal cord with an initial histopathology report of dysplasia.

15. Palsule AC, Kulkarni AA, Gadre V, Joshi D. (February 2023)

To determine knowledge, attitude, and practice regarding diabetic retinopathy among diabetic patients in a multispecialty hospital: A cross-sectional study.

J Clin Ophthalmol Res. 11:10-4.

Abstract

Context: Diabetic retinopathy (DR) is an important complication of diabetes mellitus (DM). DR accounts for 4.8% of the cases of blindness throughout the world.

Aims: To assess the patients' awareness about DR and their attitude and practice patterns in a tertiary care system in urban Maharashtra.

Subjects and Methods: A cross-sectional study was conducted in a tertiary care hospital, Pune, Maharashtra from March 2019 to April 2020 after approval from institutional review board. Patients older than 18 years and who were diagnosed with type II DM were included. Data were entered into Excel and analyzed using the SPSS software version 20.

Results: Only 28% of diabetic patients had good knowledge of DR, 82.5% were found to have positive attitude toward DR screening, and 27% had scored good in the practice score category. A significant association was found between DR knowledge with level of education ($P \leq 0.001$).

Conclusions: Better knowledge of DR influences a positive practice patterns in patients with diabetes. Onus lies on the healthcare professionals, particularly physicians as they are the first point of contact.

16. **Javadekar NS**, Joshi AP, Pradhan SP, Oka GA. (February 2023)

B12 D3 Correlation: Is Oxidative Stress a Common Link?.

Journal of Pediatric Hematology/Oncology. 10-97.

Abstract - No abstract available.

17. **Gandhi A**, Bapaye J, **Bapaye A**. (January 2023)

Indications and Outcomes of Per Oral Endoscopic Myotomy from Mouth to Anus.

Gastrointestinal Endoscopy Clinics. 33(1):99-125.

Abstract

Third space endoscopy or submucosal endoscopy using a mucosal flap valve allows secure access to the submucosal and deeper layers of the gastrointestinal tract without the risk of a full-thickness perforation. This allows the performance of submucosal tunneling and myotomy for spastic segments of the gastrointestinal tract. Per oral endoscopic myotomy (POEM) has been described for the treatment of achalasia cardia and other spastic esophageal disorders and is widely implemented. Endoscopic pyloromyotomy (G-POEM) has been performed for the treatment of refractory gastroparesis. Z-POEM for Zenker's diverticulum, D-POEM for epiphrenic diverticulum, and per-rectal endoscopic myotomy for treatment of Hirschsprung's disease are described.

18. Gandhi S, Bhatta S, Ganesuni D, Ghanpur AD, Saindani SJ. (January 2023).

Pre- and Postoperative High-Speed Videolaryngoscopy Findings in Adductor Spasmodic Dysphonia Following Transoral CO2 LASER-Guided Thyroarytenoid Myoneurectomy.

J Voice. 37(1):128-133.

Abstract

Introduction: Vocal cord vibration after transoral CO_2 LASER-guided thyroarytenoid (TA) myoneurectomy in adductor spasmodic dysphonia (AdSD) patients is unclear to date. The precise vibratory patterns in AdSD patients are difficult to evaluate with routine videolaryngostroboscopy. High-speed videolaryngoscopy (HSV) is an ideal choice to evaluate such patients. This study was performed to compare pre- and postoperative, after 6 months, vocal fold vibratory onset delay (VFVOD) and closed phase glottal cycle (CPGC) in AdSD patients following transoral CO_2 LASER-guided TA myoneurectomy using the HSV.
Materials and methods: Retrospective study, conducted from January, 2016 to January, 2019, of the AdSD patients who underwent transoral CO_2 LASER-guided TA myoneurectomy using the HSV. Patient data were acquired from the hospital database to evaluate VFVOD and CPGC from HSV recordings of the patients. VFVOD was calculated as sum of prephonatory delay (PPD) and steady-state delay (SSD). The PPD and SSD were evaluated and compared separately for each patient. The MedCal Version 19.2.6 was used for data analysis. Paired sample t test was performed to compute the significance of the difference between the mean of the dataset. A P value less than 0.05 was considered significant.
Results: A total of nine patients were included in the study, out of which three were females and six were males. The average age was 45.5 ± 6.9 years. The mean of postoperative PPD (166.8 ± 22.1), SSD (76.5 ± 8.6), and CPGC (62.6 ± 4.8) were significantly less than mean of preoperative PPD (222.6 ± 22.1), SSD (97.7 ± 9.5), and CPGC (71.6 ± 5 %), with P values of 0.0007, 0.0001, and 0.0001, respectively.
Conclusions: There was a significant decrease in VFVOD and CPGC posttransoral CO_2 LASER-guided TA myoneurectomy in AdSD patients after 6 months follow-up. This study also establishes efficiency of the HSV to measure the vocal cord vibration in the patients with AdSD. The primary limitations of the study were the small sample size and its retrospective nature. Future prospective studies with increased sample size can further substantiate the findings of the work performed here.

19. Youn SB, **Ranade AS**, Agarwal A, Belthur MV. (January 2023).

Common Errors in the Management of Idiopathic Clubfeet Using the Ponseti Method: A Review of the Literature.

Children. 10(1):152.

Abstract

Congenital talipes equinovarus is one of the most prevalent birth defects, affecting approximately 0.6 to 1.5 children per 1000 live births. Currently, the Ponseti method is the gold-standard treatment for idiopathic clubfeet, with good results reported globally. This literature review focuses on common errors encountered during different stages of the management of idiopathic clubfeet, namely diagnosis, manipulation, serial casting, Achilles tenotomy, and bracing. The purpose is to update clinicians and provide broad guidelines that can be followed to avoid and manage these errors to optimize short- and long-term outcomes of treatment of idiopathic clubfeet using the Ponseti method. A literature search was performed using the following keywords: "Idiopathic Clubfoot" (All Fields) AND "Management" OR "Outcomes" (All Fields). Databases searched included *PubMed*, *EMBASE*, *Cochrane Library*, *Google Scholar*, and *SCOPUS* (age range: 0–12 months). A full-text review of these articles was then performed looking for "complications" or "errors" reported during the treatment process. A total of 61 articles were included in the final review: 28 from *PubMed*, 8 from *EMBASE*, 17 from *Google Scholar*, 2 from *Cochrane Library*,

and 6 from *SCOPUS*. We then grouped the errors encountered during the treatment process under the different stages of the treatment protocol (diagnosis, manipulation and casting, tenotomy, and bracing) to facilitate discussion and highlight solutions. While the Ponseti method is currently the gold standard in clubfoot treatment, its precise and intensive nature can present clinicians, health care providers, and patients with potential problems if proper diligence and attention to detail is lacking. The purpose of this paper is to highlight common mistakes made throughout the Ponseti treatment protocol from diagnosis to bracing to optimize care for these patients.

20. Khaire N, Deshmukh S, Agarwal E, Mahale N, Khaladkar S, Desai S, Kulkarni A. (January 2023).
Pneumomediastinum: A marker of severity in Covid-19 disease.
Heliyon 9(1): e12981.

Abstract

Objective: The goal of this study was to look at the incidence, risk factors, clinical characteristics, and radiological aspects of COVID-19 patients who developed pneumomediastinum and compare these features between those who died and those who survived.

Materials and methods: This retrospective observational study included COVID-19 patients having pneumomediastinum on CT from May 2020 to May 2021 in a COVID-19 care hospital. 1st wave patients were considered between the period of May 2020 to January 2021 and those in the second wave between February 2021 to May 2021. The clinical details were analyzed by a consultant intensivist and CT scans were read by a team of 6 resident radiologists and 5 experienced radiologists. Demographic data, co-morbidities, clinical parameters, hemodynamic markers, radiological involvement and associated complications were analyzed.

Results: During the study period, 10,605 COVID-19 patients were admitted to our hospital of which 5689 underwent CT scan. 66 patients were detected to have pneumomediastinum on CT; 26 of them in the first wave and 40 in the second wave. Out of 66, 28 patients were admitted to ICU, 9 during the first wave and 18 during the second wave. The overall incidence of developing pneumomediastinum was 1.16%. Incidence in the 1st wave was 1.0% and in the 2nd wave was 1.29%. The overall mortality rate in admitted COVID-19 patients was 12.83% while it was 43.9% in COVID-19 patients who developed pneumomediastinum. Incidence of pneumomediastinum and pneumothorax was high in patients with extensive parenchymal involvement. 59/66 (89%) cases of pneumomediastinum had severe CT score on imaging.

Conclusion: We conclude that pneumomediastinum is a marker of poor prognosis. Timely diagnosis of interstitial emphysema or pneumomediastinum will aid in planning early protective ventilation strategies and timely intervention of complications.

21. Balushi F, Puneeth PJ , Khare M, Gandhi S. (January 2023).
Lidocaine Induced Laryngeal Angioedema in Sweet Syndrome: Is it incidental or anticipated?.
Indian Journal of Otolaryngology and Head & Neck Surgery. 1-3.

Abstract

Sweet's Syndrome is a rare inflammatory disease in which there is neutrophilic infiltration of the cutaneous tissue with or without vasculitis. Rarely, the extra-cutaneous tissue is affected. In the

ENT Clinic, Sweet Syndrome can have variable manifestations due to the possible co-existing vasculitis and autoimmune diseases. We hereby report a middle-aged male patient with active Sweet's Syndrome and developed laryngeal angioedema after receiving laryngeal wash with lidocaine for a routine video laryngoscopy.

22. Sodhi K, Khasne RW, Chanchalani G, Jagathkar G, Kola VR, Mishra M, Sahasrabudhe S, Mishra RC, Patel A, Bhavsa AR, Abbas H, Routray PK, Sood P, **Rajhans PA**, Gupta R, Soni KD, Kumar M. (January 2023).
Practice Patterns and Management Protocols in Trauma across Indian Settings: A Nationwide Cross-sectional Survey.
Indian Journal of Critical Care Medicine. 27(1):38-51.

Abstract

Background: Trauma is the leading cause of death in India resulting in a significant public health burden. Indian Society of Critical Care Medicine (ISCCM) has established a trauma network committee to understand current practices and identify the gaps and challenges in trauma management in Indian settings.

Material and methods: An online survey-based, cross-sectional, descriptive study was conducted with high-priority research questions based on hospital profile, resource availability, and trauma management protocols.

Results: Data from 483 centers were analyzed. A significant difference was observed in infrastructure, resource utilization, and management protocols in different types of hospitals and between small and big size hospitals across different tier cities in India ($p< 0.05$). The advanced trauma life support (ATLS)-trained emergency room (ER) physician had a significant impact on infrastructure organization and trauma management protocols ($p < 0.05$). On multivariate analysis, the highest impact of ATLS-trained ER physicians was on the use of extended focused assessment with sonography in trauma (eFAST) (2.909 times), followed by hospital trauma code (2.778 times), dedicated trauma team (1.952 times), and following trauma scores (1.651 times).

Conclusion: We found that majority of the centers are well equipped with optimal infrastructure, ATLS-trained physician, and management protocols. Still many aspects of trauma management need to be prioritized. There should be proactive involvement at an organizational level to manage trauma patients with a multidisciplinary approach. This survey gives us a deep insight into the current scenario of trauma care and can guide to strengthen across the country.

23. Suryawanshi CM, Shah B, Khanna S, **Ghodki P**, Bhati K, Ashok KV. (January 2023).
Anaesthetic management of robot-assisted laparoscopic surgery.
Indian Journal of Anaesthesia. 67(1):117-22.

Abstract

Recent trend shows that minimally invasive surgery is in great demand. Robot-assisted procedures have become more popular, as they overcome several drawbacks of traditional laparoscopic techniques. Robotic surgery, however, might necessitate changes in how patients are positioned and how staff and equipment are organised generally, which might go against the traditional approach

to anaesthesia care. The novel effects of this technology have the potential to produce paradigm-shifting therapeutic improvements. To provide better anaesthetic treatment and advance patient safety, anaesthesiologists should be aware of these developments by understanding the fundamental components of robotic surgical systems.

24. Ajmera P, Onkar P, **Desai S**, Pant R, Seth J, Gupte T, Kulkarni V, Kharat A, Passi N, Khaladkar S, Kulkarni VM. (January/Feb 2023).
Validation of a Deep Learning Model for Detecting Chest Pathologies from Digital Chest Radiographs.
Diagnostics. 13(3):557

Abstract
Purpose: Manual interpretation of chest radiographs is a challenging task and is prone to errors. An automated system capable of categorizing chest radiographs based on the pathologies identified could aid in the timely and efficient diagnosis of chest pathologies.
Method: For this retrospective study, 4476 chest radiographs were collected between January and April 2021 from two tertiary care hospitals. Three expert radiologists established the ground truth, and all radiographs were analyzed using a deep-learning AI model to detect suspicious ROIs in the lungs, pleura, and cardiac regions. Three test readers (different from the radiologists who established the ground truth) independently reviewed all radiographs in two sessions (unaided and AI-aided mode) with a washout period of one month.
Results: The model demonstrated an aggregate AUROC of 91.2% and a sensitivity of 88.4% in detecting suspicious ROIs in the lungs, pleura, and cardiac regions. These results outperform unaided human readers, who achieved an aggregate AUROC of 84.2% and sensitivity of 74.5% for the same task. When using AI, the aided readers obtained an aggregate AUROC of 87.9% and a sensitivity of 85.1%. The average time taken by the test readers to read a chest radiograph decreased by 21% ($p < 0.01$) when using AI.
Conclusion: The model outperformed all three human readers and demonstrated high AUROC and sensitivity across two independent datasets. When compared to unaided interpretations, AI-aided interpretations were associated with significant improvements in reader performance and chest radiograph interpretation time.

25. Jain R, Gosavi S, **Sethia D**, Jain P. (January 2023)
REMARK scoring of biomarkers predicting lymph node metastasis in oral squamous cell carcinoma–A systematic review.
SRM Journal of Research in Dental Sciences. 14(1):33-40.

Abstract
Background: A universal and systematic protocol is essential for accurate reporting of biomarker studies. For unity in reporting biomarker studies, many guidelines were introduced, Recommendations for Tumor Marker Prognostic Studies (REMARK) being one of them.

Aim: The purpose of this review is to evaluate the quality of published articles of biomarkers that predict metastasis in lymph nodes in oral squamous cell carcinoma (OSCC) by the use of the reporting recommendations for tumor marker prognostic (REMARK) guidelines.

Methods: Comprehensive search was done in MEDLINE via PubMed and Cochrane from January 2015 to December 2019 to identify manuscripts evaluating biomarkers predicting lymph node metastasis in OSCC. The significance of the univariate and multivariate analysis was assessed for each manuscript, and $P < 0.05$ was considered statistically significant.

Results: Thirty-six results were included for the qualitative synthesis. The mean REMARK score was 11.13 (range: 5.01–17.15). Biomarkers with the highest REMARK score were phospholipase C, cyclin D, CD44+/CD133+, and matrix metalloproteinase-9 (MMP-9). While biomarkers such as LGALS1, NCOA7, and TMOD1 were associated with high risk of bias, hence its use as a biomarker predicting lymph node metastasis is questionable.

Conclusions: In our review of 36 manuscripts, manuscripts examining biomarkers evaluating lymph node metastasis in OSCC need an improvement in their reporting. Biomarkers such as phospholipase C, cyclin D, CD44+/CD133+, and MMP-9 can be used as a predictor of lymph node metastasis in OSCC.

26. Bale C, Mhaske S, Purandare VB, Kulkarni A, Chavan A, Vyas N, **Purandare B**. (January 2023)
Emphysematous pyelonephritis and diabetes mellitus: A clinical perspective.
Chronicle of Diabetes Research and Practice. 2023 Jan 1;2(1):46-53.

Abstract

Emphysematous urinary tract infections (UTIs) are lower or upper UTIs associated with gas formation. Emphysematous pyelonephritis (EPN) is a rare disease but is highly prevalent in patients with diabetes and even higher among female patients with diabetes. Earlier, the mortality rate of EPN was 60%–80%, but now, it has been reduced to 20% to 25% due to the availability of good antimicrobial agents and timely treatment. Our objective of this article is to elucidate the pathogenesis of EPN including gas-forming mechanism; discuss clinical features, radiological classification, and prognostic factors; in addition, compare the modalities of management of EPN and outcome among the various radiological classes.

27. Jain R, Gosavi S, **Sethia D**, Trimukhe A. (January 2023)
Polymorphous Adenocarcinoma (PAC) Presenting As a Palatal Swelling- A Case Report.
Ann Case Rep Clin Stud. 2(1):1-11

Abstract

Background: Polymorphous adenocarcinoma is the second most common intraoral minor salivary gland tumor accounting for 26% of all carcinoma. It is characterized by varied architectural patterns with uniform cytologic picture.

Methods: We present a case of 45-year-old male who presented with a palatal swelling. neoplastic glandular epithelial cells showing variety of growth patterns and characteristic indian file pattern was also seen. Micro calcifications were also appreciated.

Results: All these features are suggestive of Polymorphous Adenocarcinoma (PAC). The patient received postoperative radiotherapy in view of close margins for a total dose of 50.4 Gy in 28 fractions. The patient is doing well 33 months post surgery without any clinical or radiological evidence of recurrence.

Conclusions: Palatal salivary gland malignancies pose a diagnostic dilemma for the pathologists. Any general practitioner should be skeptical about the palatal swelling and refer the patient to a specialist.

28. Jagtap SA, Kurwale N, Patil S, Bapat D, Joshi A, Chitnis S, Deshmukh Y, Nilegaonkar S. (December 2022)

Temporal encephalocele: a rare but treatable cause of temporal lobe epilepsy.

Epileptic Disorders. 1(1):1-8.

Abstract

Objective: Although rare, temporal encephalocele is an important causative agent in surgically remediable drug-refractory epilepsy. The ideal treatment for temporal encephalocele remains unclear with a variety of resective surgeries recommended. Here, we analyse patient data on temporal encephalocele with a view to highlighting diagnostic clues and management strategies.

Methods: Comprehensive databases at Deenanath Mangeshkar Hospital, Pune from January 2015 to June 2019 were reviewed for this observational study. Of 107 temporal lobe epilepsy surgery patients, nine individuals with temporal encephalocele were identified, who formed the study cohort. Their clinical, neuropsychological, EEG, imaging and long-term outcome data were analysed.

Results: The study cohort consisted of seven males and two females with a mean age of 22 years. Epilepsy onset age varied from 4.5 to 19 years. Seven patients had focal non-motor seizures with impaired awareness, while two patients had focal motor seizures. Temporal encephalocele detection by MRI was reported in only two patients, and was missed in seven individuals. Three patients underwent standard anterior temporal lobectomy while the remaining six underwent resection of the temporal encephalocele with surrounding temporal pole. Eight patients showed Engel Class I outcome and one showed Class IIa outcome after a mean follow-up duration of 27 months (17-44 months). Histopathology confirmed gliosis in seven, hippocampal sclerosis type I in one and suspicious dyslamination with prominent gliosis in one patient. Six of eight patients reported an improvement in their psychological state (mood, anxiety and motivation) over time.

Significance: A careful review of MRI in patients with temporal lobe epilepsy is necessary, followed by investigations for the presence of an encephalocele. When temporal lobe epilepsy is associated with encephalocele, tailored resection of the encephalocele and the surrounding temporal pole, sparing mesial temporal structures, demonstrates excellent long-term clinical and neuropsychological outcome.

29. Datar SG, Godse GN. (December 2022)

Modified Supportive Simple Limbal Epithelial Transplantation (M-SLET): A surgical technique modified for limbal stem cell deficiency.

Indian Journal of Ophthalmology. 70(12):4434-7.

Abstract

This study aimed to develop and modify the surgical technique of simple limbal epithelial transplantation in patients with limbal stem cell deficiency to provide support to epithelial explants

during the post-operative period. This is a case series of five eyes of five patients who underwent modified supportive simple limbal epithelial transplantation (M-SLET) surgery. The health and stability of the ocular surface were assessed based on clinical slit lamp examination; they were the main outcome measures. All patients had a stable ocular surface and healed epithelium during all the follow-up visits. The M-SLET technique provides additional support to limbal epithelial explants, adhering to the cornea, thus creating a stable epithelial surface. This is particularly important when there is a risk of explants being dislodged by eye rubbing.

30. Dravid A, Pilawan AS, S A, Morkar DN, Ramapuram JT, Madhukarrao KM, Naik KS, Bhrusundi M, K R R, Nageswaramma S, **Kulkarni V**. (December 2022)

Efficacy and safety of 400 mg efavirenz versus standard 600 mg dose when taken with tenofovir and lamivudine combination in Indian adult patients with HIV-1 infection: An open-label, interventional, randomized, non-inferiority trial.
Medicine (Baltimore). 101(48):e31982.

Abstract

Background: To evaluate the non-inferiority of low dose efavirenz (400 mg) to standard dose efavirenz (600 mg), when taken in combination with tenofovir and lamivudine in Indian patients with HIV-1 infection.

Methods: An open-label, interventional phase IV study with blinded assessment was conducted across 17 sites in India. HIV-1-infected antiretroviral therapy-naive adult patients (≥18 years of age) with a plasma HIV-1 viral load of at least 1000 copies per mL were randomized to receive either tenofovir/lamivudine/efavirenz (TLE) 400 or TLE 600. The primary endpoint was the difference in the proportion of patients achieving < 200 copies per mL at the end of 24 weeks.

Results: A total of 265 patients were enrolled and were randomized in 1:1 ratio to TLE 400 group (130 patients) and TLE 600 group (135 patients). At week 24, the proportion of patients with a viral load of less than 200 copies per mL was 80.70% for TLE 400 and 78.95% for TLE 600 (difference 1.75%, 90% confidence interval: -7.01, 10.49) which was within the predefined margin of -10% (90% confidence interval). Significantly lower study drug-related adverse events were observed in TLE 400 group compared to TLE 600 group (52.30%, n = 68 vs 64.92%, n = 87; P = .037). The treatment discontinuation percentage was marginally higher by 2.08% in TLE 600 group.

Conclusion: The fixed-dose combination of TLE 400 is non-inferior to TLE 600 in terms of viral suppression and has an improved safety profile over 24 weeks in adult Indian patients with HIV-1 infection.

31. Puneeth PJ, Balushi F, Gandhi S. (December 2022)

Vallecular Cyst: 10 Years Experience and Review of the Literature.
Indian Journal of Otolaryngology and Head & Neck Surgery. 1-4.

Abstract

No abstract available.

32. **Ekbote GG**, Negalur N, Tanna D, Bindroo M, Raval D, Bajad S, et al. (December 2022)

Classifying ANCA-associated vasculitis and correlating outcomes based on anti-PR3/MPO serology: A prospective study from a tertiary care center.
Amrita J Med. 18 (3):73-9. [Official publication of Amrita Institute of medical sciences, Haryana]

Abstract

Introduction: Diagnosis and management of anti-neutrophil cytoplasmic antibody (ANCA)-associated vasculitis (AAV) is a challenge for all. Overlapping features in granulomatosis with polyangiitis (GPA) and microscopic polyangiitis (MPA) make diagnosis sometimes difficult. We aimed to classify clinical features and outcomes of proven AAV according to their serology, viz., anti-PR3/myeloperoxidase (MPO) by the enzyme-linked immunosorbent assay (ELISA).

Materials and Methods: This was a prospective observational study of a total of 66 patients. This study included all consequent (old and new) AAV patients visiting a tertiary care center in northern India from August 2012 to June 2018. Patients were followed up for a minimum of 6 months. ANCA was done by both immunofluorescence assay and ELISA.

Results and Conclusion: When compared, serological classification yielded findings similar to clinical counterparts [PR3/MPO vs. GPA/MPA]. The majority [80.3%] of patients were PR3-positive and were GPA clinically. Lung involvement was common in the PR3 group; however, there was no significant difference between the two groups [viz., PR3 and MPO, P = 0.18]. ENT involvement was significantly higher in the PR3 group when compared with the MPO group [P-value=0.009]. The difference in renal involvement in both the groups was not significant [P = 0.28]. Renal biopsy findings were similar in both the PR3/MPO groups. The median follow-up period was 18 vs. 12 months in the PR3 and MPO groups, respectively. Relapse was significantly higher in the PR3 group [P = 0.017]. The PR3 group significantly required rituximab for second induction treatment [P = 0.028]. Eight patients (12.12%) died during the study period. There was no significant difference in mortality, and there was permanent organ damage in both the PR3 and MPO groups. Autoantibody-based classification is supplemental to the clinical segregation of AAV phenotypes.

33. Jain R, Gosavi S, **Sethia D**, Trimuke A, Salunke M. (December 2022)

Evaluation of Expression Of ADAM 10 as a Predictor of Lymph Node Metastasis in Oral Squamous Cell Carcinoma-An Immunohistochemical Study.
Head Neck Pathol. 16(4):1055-1062.

Abstract

Background: Lymph node metastasis (LNM) is a well-known prognostic factor in Oral Squamous Cell Carcinoma (OSCC). A biological marker that predicts the Lymph Node Metastasis (LNM) in OSCC cases is the need of the hour. A Disintegrin And Metalloproteinases (ADAMs), a family of proteins that exhibit a metalloproteinase domain play a pivotal role in the pathogenesis of tumor growth and metastasis. This study aims to evaluate whether ADAM 10 can be used as a predictor of lymph node metastasis in OSCC using immunohistochemistry.

Method: A total of 90 samples that were categorized into 3 groups were included in the present study. Group I consisted of 30 samples of the normal oral mucosa, and Group II consisted of 30 samples of OSCC without lymph node metastasis. Group III consisted of 30 samples of OSCC with lymph node metastasis. Esophageal Squamous Cell Carcinoma was used as external positive control. Immunohistochemical expression of ADAM10 in their corresponding stained sections was assessed and staining intensity was calculated.

Results: ADAM10 immunoreactivity was considered positive when located in cytoplasm or membrane or both. This method is similar to that used by Bamane et al. for OSCC cases. The mean value of the Staining Index score "AxB" was highest in Group III (7.90), followed by Group II (3.13) and least in Group I (0.27). These values were statistically significant.

Conclusion: Considering the findings of a higher percentage of ADAM10 positive cells, higher staining intensity, and higher staining index, the overexpression of ADAM10 can be used as an independent marker for OSCC patients to predict the lymph node metastasis.

34. Mahajan KD, Joshi R. (December 2022)

Evaluation of clinical Spectrum, antibiotic Sensitivity, and clinical Outcome in pediatric Age Group (0–18 Years) with Extended-spectrum Beta-lactamase-producing Escherichia coli-associated Urinary Tract Infection in Tertiary Care Hospital in India.

Pediatric Infectious Disease. 4(4):133-137.

Abstract

Background: There is an increasing prevalence of extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli*-associated urinary tract infections (UTIs) in the pediatric population. These multidrug infections are challenging to treat.

Objectives: Our aim is to study the clinical profile in children having urine culture positive with ESBL *E. coli*, antibiotic sensitivity pattern for ESBL *E. coli* in urine cultures, and evaluate clinical outcomes in patients with ESBL *E. coli*-associated UTI in our hospital.

Methods: We collected reports of all urine cultures for age group 0–18 years with colony counts >105 CFU/mL during the study period from January 2017 to December 2021 done in our hospital pathology lab. All urine culture positive reports were separated according to causative organism. From this, the subgroup of patients with ESBL *E. coli* was our study's focus. The prevalence of ESBL *E. coli* as a causative organism was calculated. These patients were further analyzed for clinical spectrum, antibiotic sensitivity pattern, and clinical outcome.

Results: Out of 450 urine culture positive reports during the study period, *E. coli* was the most common organism with 259 (57%) cases. The maximum incidence of ESBL *E. coli*-associated urinary infection was in patients between 0 and 5 years (56%). The prevalence of infection in females (59%) was slightly higher than in males (41%). Extended-spectrum beta-lactamase *E. coli* are highly sensitive to the carbapenem group of antibiotics, amikacin, and fosfomycin. Resistance was 100% for ampicillin, aztreonam, ceftriaxone, and cefixime. Other antibiotics with high resistance were trimethoprim/sulfamethoxazole and the fluoroquinolone group of antibiotics. About 25% of children had h/o previous episodes of UTI. About 43% of patients had some significant underlying medical problem. About 51% of indoor patient department (IPD) patients had normal ultrasonogram (USG) or no findings related to the renal system. Each IPD patient was treated with antibiotics (IV plus oral) for 11 days on average. There were differences between *in vitro* antibiotic sensitivity and clinical experience for a few cephalosporin antibiotics. Overall mortality among IPD patients was 4%.

Conclusions: Girls have more chances of getting UTIs due to ESBL *E. coli* than boys. Incidence of UTI due to ESBL *E. coli* is more during 0–5 years of life than in older children. Urinary tract infection due to ESBL *E. coli* is associated with high mortality. Carbapenems, amikacin, and fosfomycin are good choices of antibiotics to treat such infections. Antibiotic sensitivity patterns for cephalosporins derived by currently available methods do not always match clinical experience.

35. Bapaye J, **Korrapati SK, Gandhi A, Bapaye A**. (December 2022) Modified technique of peroral endoscopic myotomy using transnasal ultra-slim gastroscope in a child with achalasia cardia.

    VideoGIE. 2022 Dec 9;8(2):60-63. doi: 10.1016/j.vgie.2022.10.009.

    Abstract

    Video 1Demonstration of the modified technique of peroral endoscopic myotomy in a small child with achalasia cardia wherein a standard gastroscope could not be used because of anatomical constraints.

36. Kulkarni R, Gupta D, Pujari S, Deshpande V, Naphade P, Deshpande R. (November - December 2022)Neurological manifestations in COVID-19 in three waves of the pandemic: An inpatient study from India.

    Annals of Indian Academy of Neurology. 25(6):1047-55.

    Abstract

Background: Though severe acute respiratory syndrome coronavirus 2 (SARS CoV 2) virus primarily affects respiratory system, neurological involvement is well known.
Aims: To describe the neurological manifestations of coronavirus disease 2019 (COVID-19) during three waves of the pandemic.
Methodology: This was an ambispective observational single-centre study to describe the neurological manifestations of COVID-19 infection among inpatients from a tertiary care referral centre in Western India from March 2020 to January 2022.
Results: Out of 14,822 patients admitted with COVID-19, 307 (2.07%) had neurological manifestations. Neurological manifestations were seen in 1.87% in first wave (onset to 10 Feb 21); 2.37% in second wave (Feb 11, 2021 to Dec 31, 2021) and 6.26% in third wave (Jan 1, 2022 to Jan 31, 2022). The most common neurological manifestations were encephalopathy (34.5%), ischemic stroke (32.1%), and acute symptomatic seizures (8.8%). Encephalopathy ($p = 0.028$) was more common in first wave while seizures were more common in third wave ($p = 0.001$). In patients with encephalopathy, hypoxia ($p = 0.0001$), shock ($p = 0.001$), renal involvement ($p = 0.002$), and sepsis ($p = 0.033$) were associated with higher mortality; while those with no systemic involvement had better survival ($p = 0.0001$). Among patients with ischemic stroke, 32.1% did not have any traditional vascular risk factors. These patients were 9 years younger and required 6 days less hospitalization than patients of stroke with vascular risk factors.
Conclusion: SARS-CoV-2 produces many central and peripheral nervous system manifestations. Encephalopathy was more common in first wave while acute symptomatic seizures were more common in third wave. Encephalopathy was most common neurological manifestation with progressively higher mortality with increased number of systemic comorbidities. Ischemic stroke was seen in patients who had vascular risk factors as well as in patients without them.

37. Arun K C, **Gandhi SS**, Vishwavijetha S K. (November 2022)

Swallowing outcomes after posterior cordectomy with partial arytenoidectomy in bilateral abductor palsy.
J Laryngol Voice. 12:1-4

Abstract
Introduction: Laser posterior cordectomy with partial arytenoidectomy (PCPA) using CO_2 laser is one of the treatment modalities for bilateral vocal fold immobility (BVFI). In addition to maintaining an adequate airway, the procedure may cause aspiration.
Aim: The aim of this study was to study the swallowing outcomes after laser posterior cordectomy with PCPA in BVFI.
Study Design: This was a prospective observational study.
Materials and Methods: Patients undergoing laser posterior cordectomy with PCPA in bilateral abductor palsy from January 2012 to December 2014 had been examined with Fiber-optic Endoscopic Evaluation of Swallowing in 1st, 6th, and 12th weeks after surgery.
Results: Thirty-six patients fulfilled the inclusion criteria. Two patients had penetration for liquid in 1st week but recovered without intervention. None of the patients had an aspiration to liquid, semisolid, and solid ($P > 0.05$).
Conclusion: Swallowing is not hampered following laser PCPA done for bilateral immobile vocal folds.

38. Prayag PS, Panchakshari SP, Mahalle NP, Dhupad S, Patwardhan SA, Naik SS, Narawade S, Melinkeri S, Prayag AP. (November 2022)

Factors associated with subtherapeutic levels of oral posaconazole tablet: a detailed analysis from a tertiary care center in India.
Int J Infect Dis. 124:76-80.

Abstract

Objectives: Posaconazole is a broad-spectrum triazole antifungal, with activity against various clinically important fungi. The delayed release (DR) tablet of posaconazole has been shown to have a superior pharmacokinetic profile in comparison with the oral suspension.

Methods: We retrospectively analyzed the factors associated with posaconazole levels <1.25 µg/ml in 164 patients receiving the DR tablet for therapeutic purposes.

Results: Of the 164 patients, 53 (32.3%) showed subtherapeutic trough levels of posaconazole. The use of proton pump inhibitors (95% CI 1.41-3.91; P-value = 0.028) and the presence of diarrhea (95% CI 1.95-6.93; P-value = 0.001) were significantly associated with subtherapeutic levels. A total of 13 of the 21 patients receiving posaconazole tablets through a nasogastric tube had therapeutic levels.

Conclusion: This is the largest study from India that analyzed factors associated with subtherapeutic levels of the DR tablet of posaconazole. These findings reinforce the importance of therapeutic drug monitoring. Unlike in previous studies, obesity and hypoalbuminemia were not found to be significant factors in our settings. The use of proton pump inhibitors and diarrhea remained significant factors, as found in previous studies. Administering the DR tablet of posaconazole through a nasogastric tube may be a viable option.

39. Rastogi A, Kulkarni S, Deshpande S, Driver V, Berman H, Bal A, **Deshmukh M**, Nair H. (November 2022)

Novel Topical Esmolol Hydrochloride (Galnobax) For Diabetic Foot Wound: Phase 1/2, Multicentre, Randomized, Double-Blind, Vehicle-Controlled, Parallel-Group Study.

Advances in Wound Care. 0(ja).

Abstract:

Objectives: We aimed to assess safety and dose-finding efficacy of esmolol hydrochloride (Galnobax) for healing of diabetic foot ulcer (DFU).

Approach: This is phase 1/2 multicentre, randomized, double-blind, vehicle-controlled study. Participants having diabetes and non-infected, full-thickness, neuropathic, grade I or II (Wagner classification) DFU, area 1.5 cm2-10 cm2 and unresponsive to standard wound care (at least 4 weeks) were randomized to receive topical Galnobax 14% twice daily (BID), Galnobax 20% BID, Galnobax 20% once daily (OD) + vehicle or vehicle BID with standard of care. The primary efficacy endpoint was the reduction in area and volume of target ulcer from baseline to week 12 or wound closure, whichever was earlier.

Results: The wound duration was 12.5 weeks (5-49.1 weeks) and wound area 4.10 ± 2.41cm2 at baseline. The ulcer area reduction was 86.56%, 95.80%,80.67% and 82.58% (p=0.47) in the Galnobax 14%, Galnobax 20%, Galnobax 20% + vehicle and vehicle only groups, respectively. Ulcer volume reduction was99.40%in the Galnobax 14%, 83.36% in Galnobax 20%, 55.41% in the Galnobax 20% + vehicle and 84.57% in vehicle group (p=0.86). The systemic concentration of esmolol was below the quantification limit (10 ng/mL) irrespective of doses of Galnobax (Cmaxesmolol acid 340 ng/mL for 14% Galnobax, AUC 2.99±4.31 hr*ug/mL after single dose).

Innovation: This is the first clinical study of the short acting beta blocker esmolol hydrochloride used as novel formulation for healing of DFU. We found that esmolol when applied topically over wounds had minimal systemic concentration establishing its safety for wound healing in patients with diabetes.

Conclusion: Esmolol hydrochloride is a safe novel treatment for DFU.

40. Kulkarni AP, Govil D, Samavedam S, Srinivasan S, Ramasubban S, Venkataraman R, Pichamuthu K, **Jog SA**, Divatia JV, Myatra SN. (October 2022)

ISCCM Guidelines for Hemodynamic Monitoring in the Critically Ill.

Indian Journal of Critical Care Medicine. 26(S2):S67-76.

Abstract

Hemodynamic assessment along with continuous monitoring and appropriate therapy forms an integral part of management of critically ill patients with acute circulatory failure. In India, the infrastructure in ICUs varies from very basic facilities in smaller towns and semi-urban areas, to world-class, cutting-edge technology in corporate hospitals, in metropolitan cities. Surveys and studies from India suggest a wide variation in clinical practices due to possible lack of awareness, expertise, high costs, and lack of availability of advanced hemodynamic monitoring devices. We, therefore, on behalf of the Indian Society of Critical Care Medicine (ISCCM), formulated these evidence-based guidelines for optimal use of various hemodynamic monitoring modalities keeping in mind the resource-limited settings and the specific needs of our patients. When enough evidence was not forthcoming, we have made recommendations after achieving consensus amongst members. Careful integration of clinical assessment and critical information obtained from laboratory data and monitoring devices should help in improving outcomes of our patients.

41. Kelkar D., Bodhani D, Vedpathak S., Gaikwad P (Oct – Dec 2022)

Factors Affecting Psychological Health of Hospital Staff and Coping Behaviour During the Covid 19 Pandemic: A Cross Sectional Study from A Tertiary Care Hospital in Pune.

The International J. of Indian Psychology. 10(4):1872-1884.

Abstract

Background and objectives: The Covid -19 pandemic spread rapidly in India by June 2020 with Maharashtra accounting for the highest number of cases that challenged the physical and psychological wellbeing of health care workers (HCWs). This study conducted at a tertiary care hospital in Pune, explored factors associated with stress and health among Hospital staff and their coping behaviours. This was to identify barriers faced by them in providing health care and devise strategies to improve health care quality during pandemics in future.

Methods: Questionnaires eliciting personal and demographic details, social experiences, infection related questions, barriers faced by Hospital staff in care giving and that on psychological states of 2941 Hospital staff were administered during the peak phase of the first wave of the pandemic.

Results: Being in close contact with Covid -19 positive patients, age, gender, being a nurse, having to travel to place of work, relocation of self or family, comorbidity among family members, loss of income, poor knowledge about the pandemic, lack of exercise and poor participation in sports triggered negative emotions among Hospital staff.

Interpretation and conclusions: The study underlines the importance of interventions at the organisational level that include a conducive work environment that supports hospital staff by periodic evaluation of the problems they face, creating awareness and support groups for women and their families, continuing education on prevention of infections among hospital staff, provision of need based psychological support and focus on exercise and sports based services for hospital staff and their families.

42. Bhatta, S, Gandhi S, Ghanpur AD, Ganesuni D. (October 2022).

Etiology and presenting features of vocal cord paralysis: changing trends over the last two decades.

The Egyptian Journal of Otolaryngology. 38 : 131

Abstract

Background: The study was performed to evaluate the changing trends in etiology and presenting features of vocal cord paralysis (VCP) from March 1998 to March 2020.

Methods: Patient's record collected from hospital database and divided into two groups, from March 1998 to March 2009 and from April 2009 to March 2020, to evaluate the changing trends in etiology and presenting features.
Results: Total of 711 VCP patients, 80.3% with unilateral (UVCP) and 19.7% with bilateral vocal cord paralysis (BVCP) included. The commonest etiology was non-surgical (57.1%) for UVCP and surgical (55.7%) for BVCP. The commonest surgical etiology was thyroid and parathyroid surgery for both UVCP (16.6%) and BVCP (38.5%). The commonest non-surgical etiology was idiopathic for UVCP (23.1%) and malignancies for BVCP (13.6%). There was increase in surgical etiology for both UVCP (39.3 to 45.3%) and BVCP (51.2 to 57.7%), and decrease in non-surgical etiology for both UVCP (60.7 to 54.6%) and BVCP (48.8 to 42.3%). The change in voice was most common presenting features for both UVCP (69.2%) and BVCP (92.8%). The frequency of the presenting features was comparable, with decrease in the duration of symptom onset over the time period.
Conclusion: The most common etiology for UVCP was idiopathic, and for BVCP was thyroid and parathyroid surgery. For both, UVCP and BVCP there was increasing trend for surgical and decreasing trend for non-surgical etiology. The change in voice was the most common presenting complain, with decrease in duration of symptom onset over time period.

43. **Saindani S, Gandhi S**, Bhatta S, Bhola G. (October 2022)

A Prospective Observational Study to Determine the Added Clinical Value of Videokymography to Videostroboscopy in Patients with Change in Voice.
Indian Journal of Otolaryngology and Head & Neck Surgery. 1-13.
Abstract:
Videolaryngostroboscopy (VLS) is considered gold standard method for assessing voice disorders. But patients with irregular waveform of vocal folds cannot benefit from the VLS. Videokymography [VKG] is a single line real time, high speed imaging technique. It detects voice disorders based on vocal fold vibration characteristics whether the vibrations are regular or irregular. There is no standard clinical protocol or evidence on the clinical relevance of VKG for functional assessment of voice disorders. Since mechanism of voice production depends on vibration characteristics, VKG imaging leads to new possibilities for diagnosis, objective documentation and monitoring of vocal fold behavior in clinical practice in case of voice disorders. This study aims to evaluate clinical value of VKG in addition to VLS as a complementary tool for the assessment of voice disorder.

44. Pandey V, Chidambaram R, Modi A, **Babhulkar A**, Pardiwala DN, Willems WJ, Thilak J, Maheshwari J, Narang K, Kamat N, Gupta P. et al (October 2022)

Trends in Practice among Shoulder Specialists in the Management of Frozen Shoulder: A Consensus Survey.
Orthopaedic Journal of Sports Medicine. 10(10):1-12.
Abstract:
Background: The management of frozen shoulder (FS) differs depending on experience level and variation between scientific guidelines and actual practice.
Purpose: To determine the current trends and practices in the management of FS among shoulder specialists and compare them with senior shoulder specialists.
Study Design: Consensus statement.
Methods: A team of 15 senior shoulder specialists (faculty group) prepared a questionnaire comprising 26 questions regarding the definition, terminology, clinical signs, investigations, management, and prognosis of FS. The questionnaire was mailed to all the registered shoulder specialists of Shoulder and Elbow Society, India (SESI) (specialist group; n¼230), as well as to the faculty group (n¼15). The responses of the 2 groups were compared, and levels of consensus were

determined: strong (>75%), broad (60%-74.9%), inconclusive (40%-59.9%), or disagreement (<40%).

Result: Overall, 142 of the 230 participants in the specialist group and all 15 participants in the faculty group responded to the survey. Both groups strongly agreed that plain radiographs are required to rule out a secondary cause of FS, routine magnetic resonance imaging is not indicated to confirm FS, nonsteroidal anti-inflammatory drugs should be administered at bedtime, steroid injection (triamcinolone or methylprednisolone) is the next best option if analgesics fail to provide pain relief, passive physical therapy should be avoided in the freezing phase,<10% of patients would require any surgical intervention, and patients with diabetes and thyroid dysfunction tend to fare poorly. There was broad agreement that routine thyroid dysfunction screening is unnecessary for women, a single 40-mg steroid injection via intra-articular route is preferred, and arthroscopic capsular release (ACR) results in a better outcome than manipulation under anesthesia (MUA). Agreement was inconclusive regarding the use of combined random blood sugar (RBS) and glycosylated hemoglobin versus lone RBS to screen for diabetes in patients with FS, preference of ACR versus MUA to treat resistant FS, and the timing of surgical intervention. There was disagreement over the most appropriate term for FS, the preferred physical therapy modality for pain relief, the most important movement restriction for early diagnosis of FS, and complications seen after MUA.

Conclusion: This survey summarized the trend in prevalent practices regarding FS among the shoulder specialists and senior shoulder surgeons of SESI.

45. Mathew P, Kanni P, Gowda M, Devarapu C, **Ansari J**, Garg A. (October 2022)

A Comparative Study of Endoscopic Ultrasound Fine-Needle Aspiration (EUS-FNA) and Endoscopic Retrograde Cholangiopancreatography (ERCP)-Based Brush Cytology for Tissue Diagnosis in Malignant Biliary Obstruction.
Cureus. 14(10): e30291.

Abstract

Background and objective: Patients with suspected malignant biliary strictures frequently undergo endoscopic retrograde cholangiopancreatography (ERCP)-based brush cytology and endoscopic ultrasound (EUS)-guided fine-needle aspiration (FNA) for establishing the diagnosis. The outcomes of these tests aid in the further management of the patient. A comparison of these two modalities in establishing the diagnosis is seldom reported. In light of this, we aimed to compare the diagnostic efficacy between ERCP-based brush cytology and EUS-FNA for tissue diagnosis in malignant biliary obstruction. Our study involved a retrospective audit of all patients admitted to the Vydehi Institute of Medical Sciences and Research Centre for EUS and ERCP from 2015 to 2019.

Methodology: A Comparative study was conducted in the Department of Medical Gastroenterology at the Vydehi Institute of Medical Sciences and Research Centre over a five-year period. A total of 77 subjects who presented during the study period with biliary obstruction based on clinical presentation with altered liver function test in an obstructive pattern and evidence of biliary obstruction in the form of stricture or pancreaticobiliary mass on cross-sectional imaging were included in the study. All the patients included in the study underwent EUS and ERCP.

Results: The majority of the patients in the study were in the fifth decade of life with a slight female predominance. The most common CT finding was a periampullary mass with common bile duct (CBD) stricture (59.7%). In the study, EUS-FNA was more sensitive than ERCP-based tissue sampling. The overall sensitivity was 90.63% for EUS-FNA and 65.63% for ERCP sampling. EUS-FNA was found to have diagnostic accuracy of 92.63% in comparison to 71.43% for brush cytology.

Conclusions: Based on our findings, EUS-FNA is superior to ERCP-based tissue sampling with excellent sensitivity and diagnostic accuracy. Performing EUS before ERCP in all patients with

suspected malignant biliary obstruction would definitely improve diagnostic accuracy and thereby help in the management of such cases.

46. Rangan P, Mandolkar M, Kulkarni P. (October 2022)

A Retro-Prospective Observational Study to Determine the Proportion of Double Expressors in Diffuse Large B-Cell Lymphomas, Not Otherwise Specified (DLBCL, NOS) in a Tertiary Care Setting.

Journal of MAR Pathology. 1(1): 1-44. [Medical and Research publications]

Abstract

Aim: To study the proportion of cases of Double Expressors (DE) in Diffuse Large BCell Lymphomas, not otherwise specified (DLBCL, NOS) in a tertiary care setting.

Objectives: 1. To determine the proportion of cases of Double Expressors which show coexpression of BCL-2 and c-myc proteins by Immunohistochemistry in cases of DLBCL, NOS.

2. To characterize the patients according to their age-groups, gender and transformation from a lower grade lymphoma and to report these numbers.

3. To correlate, when possible, with the results of Fluorescent In-Situ Hybridization (FISH) to detect cases that harbor a c-myc translocation also showing a BCL2 translocation therefore belonging in the category of Double- Hit (DH) lymphoma.

4. To associate between the diagnosis of DE status and the clinical outcome of the patient at a minimum follow-up period of 1-year post diagnosis (regression of primary tumor, appearance of new lesions and CNS metastases or death).

Materials and Methods: Specimens from nodal and extra-nodal sites diagnosed as Diffuse Large B-Cell Lymphoma, not otherwise specified (DLBCL, NOS) preserved as paraffin blocks were subjected to Immunohistochemical (IHC) testing for determination of c-myc and BCL2 protein expression. The data was collected from the Amrita HIS and MRD viewer. In co-ordination with the clinical co-guide, the outcome of the patients at a minimum follow-up of 1-year post diagnosis was documented in terms of clinical status and imaging.

Observations & Results: 85/127 cases were noted to be Double Expressors and represented 66.9% of the total cases and 32/127 were noted to be Triple Expressors represented 25.1% of the total cases of DLBCL, NOS. Using the Hans algorithm, it was noted that 66 cases were of the GCB phenotype (66%) and 34 cases were of the ABC phenotype (34%) Double Expressors (78.78%) and Triple Expressors (31.81%) were seen more commonly in the cases with GCB phenotype. 8 cases of transformations from low grade non-Hodgkin's lymphoma were noted and 4 (50%) were known cases of Follicular lymphoma. 16 cases underwent testing by FISH. 7/16 (43.7%) cases were Double Expressors for BCL2 and c-myc by IHC. 2/7 (28.5%) cases were positive for a genetic aberration of c-myc gene, and were thus considered to be Double Hit Lymphomas. In our study, 19% of the total cases of DLBCL, NOS was the proposed population proportion of Double Hit Lymphomas. The clinical evaluation of patients at 1 year post diagnosis revealed that DLBCL, NOS cases of the GCB phenotype showed a better response to chemotherapy and had a better prognosis, as compared to their ABC phenotype counterparts. Post chemotherapy, the highest rate of relapse of 25% was seen in the group showing strong >70% staining for c- myc.

Conclusion: The results are reliable enough to predict the proportion of Double Expressors and Triple Expressors among total number of DLBCL, NOS cases. These cases should ideally be investigated with the help of FISH or PCR for detection of genetic aberrations. This study also predicts the proportion of Double Hit Lymphomas among Double Expressor Lymphomas. Cases of DLBCL, NOS should also be screened according to the intensity of c-myc staining by IHC. The number of cases with genetic aberrations may not always meet the international reporting guidelines for screening for protein over-expression (40% nuclear positivity for c-myc.) The guidelines for reporting c-myc positivity by IHC should be reviewed to include a greater range of subjects. Cases

showing c-myc staining > 70% positivity should be screened for CNS lesions to rule out involvement or relapse at the time of diagnosis and regular follow-up visits. If and when resources permit, all cases of DLBCL, NOS can be evaluated for genetic aberrations so that the ideal targeted chemotherapy is received by the patient to improve prognosis.

47. Shrigiriwar A, Zhang LY, Ghandour B, Bejjani M, Mony S, **Bapaye A**, Khashab MA. (October 2022)

Technical Details and Outcomes of Peroral Endoscopic Myotomy with Fundoplication: The First US Experience.

Gastrointestinal Endoscopy.

Abstract

Background and aims: Per Oral Endoscopic Myotomy (POEM) is an established endoscopic treatment for achalasia; however, post-POEM rates of gastroesophageal reflux disease (GERD) remain a significant cause of concern. Single session POEM with fundoplication (POEM-F) to treat achalasia was recently described to reduce post-POEM GERD. This study aims to report the technical feasibility, safety, and early outcomes of the first United States (U.S.) cohort of POEM-F.

Methods: We retrospectively reviewed all patients with achalasia treated with POEM-F at our center. The primary endpoint was technical success, defined as the successful completion of all the steps of the POEM-F procedure.

Results: A total of 6 patients (mean age 50±4.8 years; 1 female) underwent POEM-F for achalasia. Technical success was achieved in all patients (6/6), and no major immediate or delayed (up to 30 day's post-procedure) adverse events were seen. At the one-month follow-up visit, the mean Eckardt score (ES) decreased from 8.8±1.1 to 0.3±0.5. The GERD-Health-related quality of life (GERD-HRQL) and reflux symptom index (RSI) scores obtained at one month follow-up, with patients on proton pump inhibitors, were 2.3±3.7 and 2.2±2.5, respectively.

Conclusions: This first case series on POEM-F in the U.S. suggests that POEM-F is feasible and safe with excellent short-term outcomes.

48. Kalane SU, Raste L, Patwardhan S, Beasley DA, Devaskar UP. (October 2022)

Prevalence of Maternal Cytomegalovirus Antibodies and Neonatal Congenital Cytomegalovirus at Less than 34 Weeks of Gestation: A Prospective Study.

American Journal of Perinatology.

Abstract

Objective: Congenital cytomegalovirus (cCMV) acquired postnatally can lead to hearing loss and adverse central nervous system (CNS) function, especially in the preterm neonate. We prospectively determined the prevalence of maternal serum CMV-immunoglobulin (IgG) and the incidence of cCMV at <34 weeks of gestation.

Study Design: Study was conducted in the United States and India. Maternal blood was collected within 5 days after delivery. CMV-IgG antibodies were quantitated by an immunoassay. Baby's urine at birth was tested for CMV-DNA by the polymerase chain reaction.

Results: In total, 65 women and 74 neonates were studied. In the United States, 6 out of 21 (76%), while in India, 42 out of 44 (96%) mothers were seropositive (combined 89%). In the United States, none of the neonates had CMV in the urine, while in India 4 out of 52 (7.7%) were positive (combined 5.4%)

Conclusion: Mother's blood and baby's urine should be tested for serum CMV-IgG antibodies and CMV-DNA at delivery at <34-weeks of gestational age. Targeted screening will help in making an early diagnosis of cCMV, initiate therapy, and detect and treat early CNS problems including hearing loss.

49. Jagtap SA, Dole S, Thakor B, Joshi A. (October 2022)

Ruptured Cerebellopontine Angle Dermoid Cyst Presenting As Young Stroke.
Neurol India. 70:2241-2
No abstract available.

50. **Soman R**, Rege S, Jeloka T, Jhaveri TA, Bansal SB. (October 2022)

Expert group opinion for diagnosis and management of fungal infections in solid organ transplant recipients in South Asia.
Indian Journal of Transplantation. 16(5):41.

Abstract

Fungal infections, are common in solid organ transplant (SOT) recipients in South Asia. Invasive fungal infections (IFI) are the third-most common cause of infections in SOT recipients in South Asia after urinary tract infection and tuberculosis and are a significant cause of morbidity and mortality in this population. There are multiple factors, which lead to poor outcomes of these patients, i.e., lack of awareness, inadequate training of physicians, poor laboratory support to diagnose these infections, and sometimes non availability of appropriate antifungal agents to treat these infections. Among the IFI in India, invasive candidiasis is the most common followed by mucormycosis, invasive aspergillosis, and cryptococcosis. There is an increasing prevalence of azole resistance and multi-drug resistance among candida infections in South Asia. There are drug interactions of azoles with tacrolimus, cyclosporine, and everolimus and this must be kept in mind when treating various fungal infections. Another challenge is, how to screen and treat the donors and recipients before accepting them for transplant and subsequent management of transplant recipients. The most common endemic mycoses in the Asia-Pacific region are histoplasmosis caused by Histoplasma capsulatum, talaromycosis caused by Talaromyces marneffei and sporotrichosis caused by Sporothrix schenckii. The endemic fungal infections should be kept in the differential diagnosis of pyrexia of unknown origin in transplant recipients. Finally, the outcomes of these patients can be improved by increasing awareness among transplant physicians, better and wider availability of diagnostic facilities, and appropriate use of antifungal agents to treat these infections.

51. Diwan SM, Tuvar SR, Barge A, Pai P. (October 2022)

Teleconsultation in the event of an acute complication after a brachial plexus block.
Indian J Anaesth.66:734-7.
No abstract available.

52. Gokarn A, Shenoy R, Punatar S, Mirgh S, Chichra A, Nayak L, Bonda A, Jindal N, Saroha M, Toshniwal A, **Prayag P**. (October 2022)

Efficacy of artesunate for treatment of cytomegalovirus reactivation post allogeneic haematopoietic stem cell transplants.
Bone Marrow Transplantation.30:1-3.
No Abstract Available**.**

53. Waknis P, Limaye G, Mahajan M, **Joshi S**. (October 2022)

A Case of an Undiagnosed Metastasized Breast Cancer Mimicking Odontogenic Cyst—a Diagnostic Challenge.
Journal of Maxillofacial and Oral Surgery.1-5.
No abstract available.

54. Bhatta S, Sharma D, Sharma S, Maharjan L, Bhattachan S, Shah MK, Singhal A, Ghanpur AD, Ganesuni D, **Saindani SJ**. (October 2022)

Smell and Taste Disturbance in COVID-19 Patients: A Prospective Multicenteric Review.
Indian J Otolaryngol Head Neck Surg. 74(2):2978-2984.

Abstract

To study the incidence of the smell and taste disturbance in the COVID-19 patients and a follow up at 4 months to observe for the duration of resolution of these symptoms. This is a multicentric prospective study carried out in 3 different countries, from April, 2020 to January, 2021. The COVID-19 positive patients, aged between 15 and 60 years, were inquired about the presence of any smell or taste related symptoms. The same patients were followed up with the telephonic interview after 2 months and then after 4 months, respectively. The duration of resolution of the smell and taste disturbance symptoms was noted. Total of 188 COVID-19 positive patients, average age 33.1 ± 1.7 years, 54.2% males and 45.8% female were included in the study. The smell disturbance was present in 60.6% (hyposmia 36.1%, anosmia 20.2%, and parosmia 4.2%) and taste disturbance in 28.7% of patients (hypogeusia 20.2%, ageusia 6.9%, and parageusia 1.6%). There was improvement of anosmia by 97.4, hyposmia by 95.6%, parosmia by 100%, ageusia by 100%, hypogeusia 94.8%, and parageusia by 66.7%, at 4 months follow up. The present study concludes that the smell and taste disturbances are one of the main early presenting features of the COVID-19 infection. The temporary effect of the COVID-19 infection on the olfactory and gustatory pathway was also highlighted with more than 95% patients improving at 4 months of follow up.

55. Gandhi S, Arun KC, Bagul RR, Shah A, Shenoy S. (October 2022)

Demography and Pattern of Tobacco Usage in Carcinoma of Upper Aerodigestive Tract.
Indian J Otolaryngol Head Neck Surg. 74(Suppl 2):1735-1739.

Abstract

Upper aerodigestive tract (UADT) malignancies account for significant proportion of all malignancies. The aim of the study is to know the demography and patterns of tobacco consumption and the proportion of non-tobacco consumers in patients with UADT carcinoma. Patient diagnosed with primary UADT carcinoma visiting outpatient department in a tertiary centre from February 2009 to May 2011 were included in the study. 150 patients were documented with UADT carcinoma and analysed. Among these 133 were males and 17 were female. 40% of them had smoking, 25% had smokeless tobacco, 13% had both smoking and smokeless tobacco and 22% hadn't had any form of tobacco. Carcinoma larynx is the most common site and glottis is the commonest subsite. Most individuals who developed UADT carcinoma have used tobacco in some form. The high proportion of UADT carcinoma in non-tobacco consumer is alarming.

56. Gandhi S, Ganesuni D, Desai SM, Bhatta S, Ghanpur GBKAD. (October 2022)

Low Grade Laryngeal Chondrosarcoma: Clinical Presentation, Management and Short Term Outcome.
Indian J Otolaryngol Head Neck Surg. 74(Suppl 2):1893-1895.

Abstract

Low grade laryngeal chondrosarcomas are rare, slow growing tumors. Surgical removal of the tumor along with preservation of laryngeal function is the preferred modality of treatment. We report a case of a large low grade chondrosarcoma removed by transoral CO_2 LASER surgery which had avoided an open surgery.

57. Bhatta S, Gandhi S, Ganesuni D, Ghanpur AD. (October 2022)

Long term Follow Up of Severe Laryngomalacia Patients Following CO2 LASER Supraglottoplasty.
Indian J Otolaryngol Head Neck Surg. 74(Suppl 2):2472-2476.

Abstract

Laryngomalacia is the most common cause of stridor. It is believed to be due to delayed development of the supraglottic structures. On the basis of presentation, it has been divided into 3 grades. Management is dependent upon the grades: Mild and moderate laryngomalacia are managed conservatively, while CO_2 LASER supraglottoplasty is the surgical management of choice for severe disease. In this study we evaluated the outcomes of supraglottopasty in long term follow up. It was a retrospective study which included patients with severe laryngomalacia who have undergone supraglottoplasty for the dates from July 2013 to July 2018. Weight and height of the patients were taken during the follow up visit after one year and have been compared with that of the normal children of comparable age using the pediatrics growth charts. Follow up was done by telephonic conversation to evaluate the status of other symptoms associated with laryngomalacia. Total of 44 patients were included in the study, 47.7% and 52.3% females and males respectively. Weight for age, weight for height and height for age were normal in 80.9%, 80.9% and 76.1% of patients respectively after supraglottoplasty. Of the patients studied, stridor was resolved in 80.9%, early tiredness during play was resolved in 43.2%, swallowing was normal in 85.7% and there was no aspiration in 90.5%. It can be concluded that patients with severe laryngomalacia improved with respect to airway symptoms, as well as, weight and height on long term follow up after CO_2 LASER supraglottoplasty. It is important to evaluate the general status of the patients as a whole to truly assess the success of the surgery in addition to the airway symptoms.

58. Garg D, Yoganathan S, Shamim U, Mankad K, Gulati P, Bonifati V, Botre A, **Kalane U**, Saini AG, Sankhyan N, Srivastava K. (October 2022)

Clinical Profile and Treatment Outcomes of Hypermanganesemia with Dystonia 1 and 2 among 27 Indian Children.

Movement Disorders Clinical Practice. 9(7):886-99.

Abstract

Background: Hypermanganesemia with dystonia 1 and 2 (HMNDYT1 and 2) are rare, inherited disorders of manganese transport.

Objectives: We aimed to describe clinical, laboratory features, and outcomes among children with HMNDYT.

Methods: We conducted a retrospective multicenter study involving tertiary centers across India. We enrolled children between 1 month to 18 years of age with genetically confirmed/clinically probable HMNDYT. Clinical, laboratory profile, genetic testing, treatment details, and outcomes scored by treating physicians on a Likert scale were recorded.

Results: We enrolled 27 children (19 girls). Fourteen harbored *SLC30A10* mutations; nine had *SLC39A14* mutations. The *SLC39A14* cohort had lower median age at onset (1.3 [interquartile range (IQR), 0.7–5.5] years) versus *SLC30A10* cohort (2.0 [IQR, 1.5–5.1] years). The most frequent neurological features were dystonia (100%; n = 27), gait abnormality (77.7%; n = 21), falls (66.7%; n = 18), and parkinsonism (59.3%; n = 16). Median serum manganese (Mn) levels among *SLC39A14* (44.9 [IQR, 27.3–147.7] mcg/L) cohort were higher than *SLC30A10* (29.4 [17.1–42.0] mcg/L); median hemoglobin was higher in *SLC30A10* (16.3 [IQR, 15.2–17.5] g/dL) versus *SLC39A14* cohort (12.5 [8.8–13.2] g/dL). Hepatic involvement and polycythaemia were observed exclusively in *SLC30A10* variants. A total of 26/27 children underwent chelation with disodium calcium edetate. Nine demonstrated some improvement, three stabilized, two had marked improvement, and one had normalization. Children with *SLC39A14* mutations had poorer response. Two children died and nine were lost to follow-up.

Conclusions: We found female predominance. Children with *SLC39A14* mutations presented at younger age and responded less favorably to chelation compared to *SLC30A10* mutations. There is emerging need to better define management strategies, especially in low resource settings.

59. **Borse M, Godbole G, Kelkar D, Bahulikar M**, Dinneen E, Slack M. (September 2022)

Early evaluation of a next-generation surgical system in robot-assisted total laparoscopic hysterectomy: A prospective clinical cohort study.

Acta Obstetricia et Gynecologica Scandinavica. 101(9):978-86.

Abstract

Introduction: This study aimed to demonstrate the safe and effective use of the Versius surgical system (CMR Surgical, Cambridge, UK) in robot-assisted total laparoscopic hysterectomy. This surgical robot was developed iteratively with input from surgeons to improve surgical outcomes and end-user experience. We report data from the gynecology cohort of an early clinical trial designed in broad alignment with IDEAL-D (Idea, Development, Exploration, Assessment, Long-term follow-up – Devices) stage 2b (Exploration).

Material and methods: The study is registered in the Indian clinical trials register (CTRI/2019/02/017872). Adult women requiring total hysterectomy who provided informed consent and met the eligibility criteria underwent procedures at one of three hospitals in India. Five surgeons performed robot-assisted total laparoscopic hysterectomies using the device from March 2019 to September 2020. The primary endpoint was rate of unplanned conversion to conventional laparoscopic or open surgery. Adverse events were adjudicated by an independent clinical events committee using endoscope video recordings and clinical notes.

Results: In total, 144 women underwent surgery (median age: 44 years [range: 28–78]; median body mass index 25.8 kg/m2 [range: 14.3–47.8]). The rate of unplanned conversion to conventional laparoscopy was 2/144 (1.4%); neither conversion was device related. No surgery was converted to open. In total, 13 adverse events occurred among seven (4.9%) patients, comprising seven serious adverse events and six adverse events. One serious adverse event was deemed device-related. Two patients were readmitted to hospital within 30 days; both made a full recovery. No patients died within 90 days of surgery.

Conclusions: The device provides a safe and effective option for total laparoscopic hysterectomy; these findings support its continued implementation in larger patient cohorts and expansion in other major minimal access indications.

60. Kanvinde S, Mulay A, Deshpande A, Deshmukh C, Patwardhan S. (September 2022)

Once-a-Day Ceftriaxone–Amikacin Combination as Empiric Antibiotic Therapy to Enable Outpatient Management of Febrile Neutropenia in Children—16-Year Experience from a Single Institute.

South Asian J Cancer. 11(4): 370-77

Abstract

Background: To enable outpatient department (OPD) management of febrile neutropenia (FN), we used once-a-day (OD) ceftriaxone–amikacin (CFT-AMK) as empiric antibiotic therapy. Our experience over 16-year period is presented.

Methods: This was a retrospective study conducted from January2002 to December2017. Inclusion criteria were 48 to 72 hours after CFT-AMK. Outcomes analyzed were response (defervescence within 48–72 hours), OPD management, antibiotic upgrade, and mortality. AML diagnosis, >7 days to absolute neutrophil count >0.5 109 /L, poor performance status, and malignancy not in remission were considered high-risk FN criteria.

Results: CFT-AMK was given in 877/952 (92.2%) FN episodes. Seventy-six percent had hematolymphoid malignancies. Response, antibiotic upgrade, and mortality were seen in 85.7 and 65.5% ($p < 0.0001$), 15 and 45.5% ($p < 0.0001$), and 0 and 2% (p ¼ 0.003) of low- and high-risk patients, respectively. Treatment was started in OPD in 52%, of which 21.6% required subsequent admission. Of those initially admitted, early discharge (hospital stay < 5 days) was possible in 24.6%. Forty-one percent episodes were managed entirely on OPD. Overall, 80% of low-risk and 42% of high-risk episodes received treatment wholly or partially on OPD.

Conclusion: Our results show empiric OD CFT-AMK allows OPD management for most of the low-risk and a proportion of high-risk FN following chemotherapy in children, without compromising clinical outcomes.

61. **Babhulkar AS**, Agrawal AK, Ramaswamy AG, **Patil PC, Vimalkumar KH**. (September 2022)

Results of arthroscopic rotator cuff repairs in patients with comorbid disability of other extremities.
Journal of Arthroscopic Surgery and Sports Medicine. 3(2):90-3.

Abstract

Objectives: We hypothesized that arthroscopic rotator cuff repair improves functional and clinical outcomes in the patients with comorbid disability in the extremities.

Materials and Methods: In a retrospective study, data were collected for eleven patients (six males and five females) from a tertiary care hospital from 2010 to 2018. All the patients underwent arthroscopic rotator cuff repair after confirmed clinical and radiological diagnosis. All the patients were operated on by a single surgeon. UCLS scores and ultrasound imaging were used for pre-operative and post-operative clinical and radiological evaluation, respectively. The mean follow-up was of 3 years. Statistical analysis was carried out using SPSS software and statistical significance was considered at $P < 0.05$.

Results: Out of 11 patients, seven patients had massive cuff tears, two patients had medium cuff tears, and two patients had small cuff tears. Out of 11 patients, three patients were contralateral side amputees, four patients were wheelchair-bound due to post-poliomyelitis muscle weakness, one patient had opposite side hand amputation, and three patients had same side hemiplegia secondary to cerebrovascular stroke. The dominant side was involved in eight patients and the non-dominant side was involved in three patients. Functional range of motion, the visual analog scale for pain, and satisfaction and UCLS scores improved significantly after arthroscopic cuff repairs. Ultrasound evaluation after a mean of 14 ± 3 months revealed complete healing in 88% of cases and partial healing in 12% of cases.

Conclusion: Arthroscopic rotator cuff repair improves functional and clinical outcomes in patients with comorbid disability in the extremities. Careful and meticulous clinical acumen, surgical planning, technique, and post-operative rehabilitation program are important for excellent outcomes in arthroscopic cuff repairs, especially in these functionally high-demanding patients.

62. Conway Morris A, Kohler K, De Corte T, Ercole A, De Grooth HJ, Elbers PWG, Povoa P, Morais R, Koulenti D, **Jog S**, Nielsen N, Jubb A, Cecconi M, De Waele J; ESICM UNITE COVID investigators. (August 2022)

Co-infection and ICU-acquired infection in COIVD-19 ICU patients: a secondary analysis of the UNITE-COVID data set.
Crit Care. 26(1):236.

Abstract

Background: The COVID-19 pandemic presented major challenges for critical care facilities worldwide. Infections which develop alongside or subsequent to viral pneumonitis are a challenge under sporadic and pandemic conditions; however, data have suggested that patterns of these differ between COVID-19 and other viral pneumonitides. This secondary analysis aimed to explore patterns of co-infection and intensive care unit-acquired infections (ICU-AI) and the relationship to use of corticosteroids in a large, international cohort of critically ill COVID-19 patients.

Methods: This is a multicenter, international, observational study, including adult patients with PCR-confirmed COVID-19 diagnosis admitted to ICUs at the peak of wave one of COVID-19 (February 15th to May 15th, 2020). Data collected included investigator-assessed co-infection at ICU admission, infection acquired in ICU, infection with multi-drug resistant organisms (MDRO) and antibiotic use. Frequencies were compared by Pearson's Chi-squared and continuous variables

by Mann–Whitney U test. Propensity score matching for variables associated with ICU-acquired infection was undertaken using R library MatchIT using the "full" matching method.

Results: Data were available from 4994 patients. Bacterial co-infection at admission was detected in 716 patients (14%), whilst 85% of patients received antibiotics at that stage. ICU-AI developed in 2715 (54%). The most common ICU-AI was bacterial pneumonia (44% of infections), whilst 9% of patients developed fungal pneumonia; 25% of infections involved MDRO. Patients developing infections in ICU had greater antimicrobial exposure than those without such infections. Incident density (ICU-AI per 1000 ICU days) was in considerable excess of reports from pre-pandemic surveillance. Corticosteroid use was heterogenous between ICUs. In univariate analysis, 58% of patients receiving corticosteroids and 43% of those not receiving steroids developed ICU-AI. Adjusting for potential confounders in the propensity-matched cohort, 71% of patients receiving corticosteroids developed ICU-AI vs 52% of those not receiving corticosteroids. Duration of corticosteroid therapy was also associated with development of ICU-AI and infection with an MDRO.

Conclusions: In patients with severe COVID-19 in the first wave, co-infection at admission to ICU was relatively rare but antibiotic use was in substantial excess to that indication. ICU-AI were common and were significantly associated with use of corticosteroids.

63. Dravid A, Morkar D, Prasad D, Ramapuram JT, Patel KV, Naik KS, Bhrusundi M, Kulkarni M, Hegde S, Anuradha S, Nageswaramma S, Madan S, Jayaprakash T, **Kulkarni V**. (August 2022)

A Phase IV Study on Safety, Tolerability and Efficacy of Dolutegravir, Lamivudine, and Tenofovir Disoproxil Fumarate in Treatment Naïve Adult Indian Patients Living with HIV-1.
Pragmat Obs Res. 13:75-84.

Abstract

Purpose: WHO recommends dolutegravir (DTG) based regimens as first-line treatment for HIV-1 infection. However, few studies have been conducted in Indian population. Hence, our study evaluated the safety, tolerability, and efficacy of DTG 50 mg with Tenofovir and Lamivudine (300/300mg) fixed dose combination in treatment naïve adult Indian patients.

Methods: This was an open label, multicenter, prospective, interventional, phase IV study conducted across 14 sites between February 2019 and July 2020. 24 weeks was the treatment duration for each subject. The primary end point was to assess the incidence of adverse events (AEs) and secondary end points were to assess the proportion of patients achieving plasma HIV-1 RNA levels <50 copies/mL at week 24 and change in CD4+ cell count from the baseline. Safety analysis was conducted using Safety Analysis Set and efficacy analysis was carried out using Full Analysis Set and per protocol set.

Results: A total of 288 patients were screened; 250 were enrolled; and 229 completed the study. 389 AEs were reported from 58% of patients. Of these, 61 were related to study treatment. One event of decreased creatinine clearance led to study discontinuation. One serious event of pyrexia was reported, which was unrelated to the study drug. The most common AEs were headache (18%), pyrexia (14%), vomiting (6.4%) and upper respiratory tract infections (6%). No deaths were reported. At week 24, 86.8% of the patients achieved plasma HIV-1 RNA levels <50 copies/mL and the mean CD4 cell count increased from 350.2 (SD, 239.73) at baseline to 494.6 (SD, 261.40) with an average increase of 143.2 (SD, 226.14) cells.

Conclusion: This study demonstrated the safety and efficacy of DTG based regimen in treatment naïve HIV-1 patients in Indian population and support use of DTG as first-line treatment regimen.

64. Tupe R, **Panchwagh Y**, Bartakke G, Puranik R, Waghchoure C. (August 2022)

A Rare Cause of Ankle Pain – Chondrosarcoma of the Talus: A Case Report and Literature Review.
Journal of Orthopaedic Case Reports. 12(8): 70-74.

Abstract

Introduction: Chondrosarcoma of the talus is one of the rare causes of ankle pain. Often this pain is neglected by the patients. Hence, the presentation is late. A rare occurrence, lack of clinical familiarity, and resemblance to enchondroma make the diagnosis of chondrosarcoma difficult.

Case Report: We present a case of chondrosarcoma of talus in a 42-year-old female, which is an uncommon site of occurrence. In the presence of non-classical radiologic and histologic findings, the patient was treated with below-knee amputation. At present, the patient is disease-free and walking with a prosthesis.

Conclusion: Talus is an infrequent site for chondrosarcoma. When affected, it presents as vague ankle pain. A patient can be underdiagnosed as there are no clear radiological and histological guidelines to differentiate between benign and low-grade cartilaginous tumors such as enchondroma and low-grade chondrosarcoma. Histologically proven benign lesions must be followed for a long time in suspicion of malignancy. The treatment of chondrosarcoma of the talus can vary from local wide excision to below-knee amputation, depending on the grade of malignancy

65. Khare P, Kashyapi R, Ranade M. (July-December 2022)

Current Concepts in Regional Analgesia Techniques for Postoperative Pain Management after Total Shoulder Arthroplasty: A Narrative Review.
International Journal of Regional Anaesthesia. 3(2): 42-48.

Abstract

Postoperative pain management after total shoulder arthroplasty (TSA) can be challenging. Interscalene brachial plexus block (ISB), which is administered either as single shot injection (ssISB) or with continuous catheter (ccISB) technique, is the gold standard. Ultrasonography (USG) guidance facilitates a faster, more accurate block with a lower local anaesthetic volume in ssISB. USG also helps for accurate catheter placement in ccISB. Hemi-diaphragmatic palsy is a common complication of ISB. This can be a major concern for patients with a respiratory compromise so it necessitates the administration of diaphragmsparing nerve blocks. Phrenic nerve sparing block like suprascapular nerve block (SSNB) singly or along with axillary nerve block, subomohyoid anterior suprascapular block, superior trunk block, erector spinae plane block, individually, provide perioperative analgesia non-inferior to ISB. Subacromial or intraarticular infiltration of local anaesthesia (SAIA) is not recommended due to its limited clinical efficacy. Extended analgesic effects have been observed with the continuous catheter (ccISB) technique and liposomal bupivacaine when used as a field block. This article provides an overview of regional anaesthesia techniques for postoperative analgesia following Total shoulder arthroplasty (TSA).

66. Giri A, Kumar L, **Kurwale N**, Gandhi TK. (July 2022)

Anatomical harmonics basis based brain source localization with application to epilepsy.
Scientific Reports. 12(1):1-4.

Abstract

Brain Source Localization (BSL) using Electroencephalogram (EEG) has been a useful noninvasive modality for the diagnosis of epileptogenic zones, study of evoked related potentials, and brain disorders. The inverse solution of BSL is limited by high computational cost and localization error. The performance is additionally limited by head shape assumption and the corresponding harmonics basis function. In this work, an anatomical harmonics basis (Spherical Harmonics (SH), and more particularly Head Harmonics (H2)) based BSL is presented. The spatio-temporal four shell head model is formulated in SH and H2 domain. The anatomical harmonics domain formulation leads to dimensionality reduction and increased contribution of source eigenvalues, resulting in decreased computation and increased accuracy respectively. The performance of spatial subspace based Multiple Signal Classification (MUSIC) and Recursively Applied and Projected (RAP)-MUSIC

method is compared with the proposed SH and H2 counterparts on simulated data. SH and H2 domain processing effectively resolves the problem of high computational cost without sacrificing the inverse source localization accuracy. The proposed H2 MUSIC was additionally validated for epileptogenic zone localization on clinical EEG data. The proposed framework offers an effective solution to clinicians in automated and time efficient seizure localization.

67. Kumar L, Kn N, Gujral S, **Kulkarni P**, Stockler MR, Nair R. (July 2022)

Editorial: Real World Outcomes of Lymphoma from India.
Front Oncol. 12:922370.
No abstract available.

68. Wanjarkhedkar P, Sarade G, Purandare B, Kelkar D. (July-September 2022)

The Post-COVID 19 long term surveillance study sequel to an add-on Ayurveda regimen.
J Ayurveda Integr Med. 13(3):100575.

Abstract

It has been 18 months now since the world-wide outbreak of COVID 19 (Corona Virus Disease 19) and still the ongoing research is being done for disease specific medicines. During June 2020 to August 2020, an attempt was made to explore if an add-on Ayurveda regimen comprising of Dasamoolkadutrayadi Kashayam and Guluchyadi Kwatham in tablet forms can be prescribed along with standard of care; which has established the clinical evidence that there is advantage of accelerated symptomatic recovery, early discharge from hospital, reducing the duration of hospital stay. After informed consent the patients were followed up over 9 months after discharged from hospital. The purpose of the present extended study was to find the impact of disease even though patients were discharged after appropriate treatment and if there were any late effects in the add-on Ayurveda treatment group after 9 months as it was one of the first few formal studies world-wide; since there was no long term follow up data available. The study concluded that no additional late effects or symptoms or complications which were known in Post COVID phase; were observed in study group who received the add-on Ayurveda regimen as compared to the control group with conventional standard of care.

69. Arun GR, Babhulkar AS, Unnithan V, Srinivasan N, Sindhu B, Kumar PS. (July-September 2022)

CT Based Measurement of Coracoid Process Dimension and a Technique to Measure in our Population.
Journal of Arthroscopy and Joint Surgery. 9(3):122-6.

Abstract

Aim: The aim of this study was to do computed tomography (CT)-based measurement of coracoid process dimension and a technique to measure in our population.

Materials and Methods: One hundred and twenty-three shoulder CT scans were analyzed in the adult Indian population. The images were processed using curviplanar reconstruction method to straighten out the curved coracoid process. The mean dimensions of coracoid process in relation to anteroposterior length, mediolateral distance, and supero-inferior distance were measured and tabulated along with age and gender differences. Paired t-test or Wilcoxon signed-rank test was used as a test of significance, and $P < 0.05$ was considered statistically significant.

Results: In the study, the mean anteroposterior length was 25.80 ± 3.09 mm, the mean mediolateral length was 12.02 ± 1.82 mm, and the mean supero-inferior length was 10.27 ± 1.64 mm. No statistically significant difference was seen between the two observers, giving power to the method used.

Conclusion: In this CT-based analysis of coracoid process, we can estimate the average dimension of coracoid process available in our population and also the preference of surgical procedure

according to the glenoid bone loss. Furthermore, it was concluded that CT-based measurements of coracoid process were well correlated between the orthopedician and the radiologist. Hence, these measurements can be used as a tool to estimate the average length available for transfer in the Latarjet procedure in our population.

70. **Jog S**, Zirpe K, Dixit S, **Godavarthy P**, **Shahane M**, Kadapatti K, Shah J, Borawake K, Khan Z, Shukla U, Jahagirdar A, Dhat V, D'costa P, Shelgaonkar J, Deshmukh A, Khatib K, Prayag S. (July 2022)

Noninvasive Respiratory Assist Devices in the Management of COVID-19-related Hypoxic Respiratory Failure: Pune ISCCM COVID-19 ARDS Study Consortium (PICASo).
Indian J Crit Care Med. 26(7):791-797.

Abstract

Objective: To determine whether high-flow nasal oxygen (HFNO) or noninvasive ventilator (NIV) can avoid invasive mechanical ventilation (IMV) in COVID-19-related acute respiratory distress syndrome (ADRS), and the outcome predictors of these modalities.

Design: Multicenter retrospective study conducted in 12 ICUs in Pune, India.

Patients: Patients with COVID-19 pneumonia who had PaO_2/FiO_2 ratio <150 and were treated with HFNO and/or NIV.

Intervention: HFNO and/or NIV.

Measurements: The primary outcome was to assess the need of IMV. Secondary outcomes were death at Day 28 and mortality rates in different treatment groups.

Main results: Among 1,201 patients who met the inclusion criteria, 35.9% (431/1,201) were treated successfully with HFNO and/or NIV and did not require IMV. About 59.5% (714/1,201) patients needed IMV for the failure of HFNO and/or NIV. About 48.3, 61.6, and 63.6% of patients who were treated with HFNO, NIV, or both, respectively, needed IMV. The need of IMV was significantly lower in the HFNO group (p <0.001). The 28-day mortality was 44.9, 59.9, and 59.6% in the patients treated with HFNO, NIV, or both, respectively (p <0.001). On multivariate regression analysis, presence of any comorbidity, SpO_2 <90%, and presence of nonrespiratory organ dysfunction were independent and significant determinants of mortality (p <0.05).

Conclusions: During COVID-19 pandemic surge, HFNO and/or NIV could successfully avoid IMV in 35.5% individuals with PO_2/FiO_2 ratio <150. Those who needed IMV due to failure of HFNO or NIV had high (87.5%) mortality.

71. Rao SS, Sonawane CS, Wakankar HM. (June 2022)

Antiphospholipid antibody syndrome presenting as foot gangrene after bilateral total knee arthroplasty: A case report.
Int J Case Rep Orthop. 4(2):26-28.

Abstract

Case: A 71 years old female who underwent bilateral total knee replacement, noted discolouration of toes and plantar aspect of right foot, along with cold right foot, 1 week after surgery due to thrombosis of dorsalis pedis artery in spite of adequate anticoagulation. She was eventually diagnosed with Anti phospholipid antibody (APLA) syndrome. Conclusion: APLA is not routinely investigated in preoperative workup for arthroplasty. It is also not a common condition in orthopaedic practice. Some patients may develop thrombosis after arthroplasty in spite of adequate thromboprophylaxis and a rare cause like APLA has to be kept in mind to help in ensuring appropriate treatment.

72. Kalane S, Wagh S, Deshpande MJ, et al. (June 2022)

Giggles: Development of a New Eye Covering Device Used During Neonatal Phototherapy.

J Pediatr Neonatal. 4(2):1-6.

Abstract

About 10 % of all neonates worldwide develop jaundice needing phototherapy (PT) during which an eye covering device (ECD) is used. The existing ECDs made of fabric are tight bands preventing the baby from opening his eye lids, are a source of discomfort and are not aesthetic. The major emphasis of new ECD named Giggles was to use a dome like design allowing free eye lid movements. It was also important to ensure complete light blockage, a good fit to prevent dislodgement, easy to clean, non-fabric material, reusable while maintaining good hygiene, soft, not causing skin irritation, mouldable, light, medically acceptable, durable, affordable and aesthetic. An open label randomized control trial was conducted to compare the efficacy of giggles vs the existing ECD. All neonates needing PT who were >35 weeks G.A. and B.W. >2.0 kg were eligible for the study. Babies in the control group (n-30) were treated with the standard ECD while those in the study group (n-30) were treated with Giggles. Primary outcomes were baby's comfort level and irritability, the number of spontaneous dislodgements needing reapplication and the aesthetics. Babies in the study group did better during breast or the cup feeding. Babies in the study group were more comfortable and easier to take care of. Episodes of dislodgement needing reapplication were similar. Care givers and the parents alike loved the aesthetics of giggles.

73. Chowdhury D, Chaudhuri JR, Ghosh P, **Kulkarni R**, Singh S, Thakur S, Thorat AV. (June 2022)

Efficacy and tolerability of erenumab for prevention of episodic migraine in India.

Ann Indian Acad Neurol. 25:433-40.

Abstract

Background: EMPOwER, a 12-week, double-blind (DB), randomized, placebo-controlled study evaluated the efficacy and safety of erenumab in adult patients with episodic migraine (EM) from Asia, the Middle East, and Latin America. This study analyzes the Indian experience for the use of erunumab for prevention of episodic migraine.

Objective: The study aimed to evaluate the efficacy and tolerability of erenumab (70 mg and 140 mg) in EM patients from India.

Methods: Randomized patients received monthly subcutaneous injections of placebo and erenumab 70 mg or 140 mg for 3 months. The primary endpoint was a change from the baseline in monthly migraine days (MMDs) at month 3. Other endpoints included achievement of ≥50%, ≥75%, and 100% reduction in MMD; a change in monthly acute migraine-specific medication treatment days; a change in patient-reported outcomes; and safety assessment.

Results: Of the 539 patients screened, 351 patients were randomized (erenumab, 70 mg: n = 133 and 140 mg: n = 94; placebo: n = 124). The mean (±SD) age, disease duration, and MMD were 35.1 (±8.6) years, 6.77 (±6.01) years, and 7.82 (±2.89) days, respectively. The placebo-adjusted difference in mean MMD for erenumab 70 mg was -0.88 (95% CI, -2.16, 0.39; P = 0.174) days, and that for erenumab 140 mg was -1.01 (-2.42, 0.41; P = 0.164) days versus placebo. Secondary and exploratory endpoints demonstrated consistently better results in both erenumab dosage groups versus placebo. Treatment-emergent adverse events were comparable across groups (erenumab, 70 mg: 22.7% and 140 mg: 24.5%; placebo: 25.2%).

Conclusion: Both doses of erenumab showed numerical improvement for efficacy endpoints and were well-tolerated in the Indian population. No new safety signals were reported.

74. Jain R, Gosavi S, **Sethia D**, Trimuke A, Salunke M. (June 2022)

Evaluation of Expression of ADAM 10 as a Predictor of Lymph Node Metastasis in Oral Squamous Cell Carcinoma—An Immunohistochemical Study.

Head and Neck Pathology. 30:1-8.

Abstract

Background: Lymph node metastasis (LNM) is a well-known prognostic factor in Oral Squamous Cell Carcinoma (OSCC). A biological marker that predicts the Lymph Node Metastasis (LNM) in OSCC cases is the need of the hour. A Disintegrin and Metalloproteinases (ADAMs), a family of proteins that exhibit a metalloproteinase domain play a pivotal role in the pathogenesis of tumor growth and metastasis. This study aims to evaluate whether ADAM 10 can be used as a predictor of lymph node metastasis in OSCC using immunohistochemistry.
Method: A total of 90 samples that were categorized into 3 groups were included in the present study. Group I consisted of 30 samples of the normal oral mucosa, and Group II consisted of 30 samples of OSCC without lymph node metastasis. Group III consisted of 30 samples of OSCC with lymph node metastasis. Esophageal Squamous Cell Carcinoma was used as external positive control. Immunohistochemical expression of ADAM10 in their corresponding stained sections was assessed and staining intensity was calculated.
Results: ADAM10 immunoreactivity was considered positive when located in cytoplasm or membrane or both. This method is similar to that used by Bamane et al. for OSCC cases. The mean value of the Staining Index score "AxB" was highest in Group III (7.90), followed by Group II (3.13) and least in Group I (0.27). These values were statistically significant.
Conclusion: Considering the findings of a higher percentage of ADAM10 positive cells, higher staining intensity, and higher staining index, the overexpression of ADAM10 can be used as an independent marker for OSCC patients to predict the lymph node metastasis.

75. Vij N, Belthur M, **Ranade AS**. (June 2022)

Acute Isolated Irreducible Proximal Interphalangeal Joint Dislocation of the Fifth Toe in a Toddler: A Case Report.
Cureus. 14(6): e25630.

Abstract
A male child aged three years and three months presented after stubbing his right fifth toe. Imaging revealed a dorsolateral dislocation of the proximal interphalangeal joint (PIPJ). After failed attempts at closed reduction, open reduction and internal fixation was pursued. At the one-year follow-up, the patient was found to be doing well clinically and radiographically. These types of injuries require a high degree of clinical suspicion to obtain the proper imaging. The interposition of adjacent soft tissues can render these injuries irreducible. When irreducible, open reduction and pin fixation may be appropriate after an adequate trial of closed reduction under anesthesia. Concomitant ligamentous injuries, avulsion injuries, and fracture-dislocations often accompany these injuries; however, they can also occur in isolation.

76. Dave JR, Chandekar SS, Behera S, Desai KU, Salve PM, Sapkal NB, Mhaske ST, Dewle AM, Pokare PS, **Page M, Jog A** ----- Tomar GB (June 2022)

Human gingival mesenchymal stem cells retain their growth and immunomodulatory characteristics independent of donor age.
Science Advances. 8(25): eabm6504.

Abstract
Aging has been reported to deteriorate the quantity and quality of mesenchymal stem cells (MSCs), which affect their therapeutic use in regenerative medicine. A dearth of age-related stem cell research further restricts their clinical applications. The present study explores the possibility of using MSCs derived from human gingival tissues (GMSCs) for studying their ex vivo growth characteristics and differentiation potential with respect to donor age. GMSCs displayed decreased in vitro adipogenesis and in vitro and in vivo osteogenesis with age, but in vitro neurogenesis remained unaffected. An increased expression of p53 and SIRT1 with donor age was correlated to their ability of eliminating tumorigenic events through apoptosis or autophagy, respectively.

Irrespective of donor age, GMSCs displayed effective immunoregulation and regenerative potential in a mouse model of LPS-induced acute lung injury. Thus, we suggest the potential of GMSCs for designing cell-based immunomodulatory therapeutic approaches and their further extrapolation for acute inflammatory conditions such as acute respiratory distress syndrome and COVID-19.

77. **Pathak S**, Chaudhary D, Reddy KR, Acharya KKV, **Desai SM**. (June 2022)

Efficacy and safety of CARTIGROW® in patients with articular cartilage defects of the knee joint: a four year prospective study

International Orthopaedics (SICOT). 46(6):1313-1321.

Abstract

Introduction: Research shows autologous chondrocyte implantation (ACI) is a promising treatment for articular cartilage lesions. In this study, we assessed mid-term efficacy and safety of gel-based ACI or autologous adult live cultured chondrocytes (CARTIGROW®) implantation in patients with cartilage defects of the knee joint.

Methods: In this prospective, open-label study, patients (19-38 years) with focal, international cartilage repair society grade III or IV articular cartilage defects of the knee joint were enrolled at four centres across India from April 2015 to September 2015. Punch biopsy was conducted to harvest cartilage, from which chondrocytes were isolated and cultured, and the characterised chondrocytes were implanted into the cartilage defect. Key efficacy outcomes were assessed by quantitative changes in international knee documentation committee (IKDC), visual analogue scale (VAS) scores, and qualitative changes in magnetic resonance imaging at six months and four years from baseline.

Results: Of the14 patients enrolled in the study, all patients completed the six month follow-up and 11 completed the four year follow-up. The IKDC score improved significantly from 32.84 ± 9.25 at baseline to 67.49 ± 13.03 at six months (mean difference [MD] 34.66 ± 13.00, $p < 0.0001$) and to 60.18 ± 10.33 at four years (MD 28.21 ± 15.14, $p = 0.0001$). The VAS score reduced from 72.00 ± 14.40 at baseline to 16.64 ± 17.03 at six months (MD 55.36 ± 24.50, $p < 0.0001$) and further to 12.72 ± 9.05 at four years (MD 62.09 ± 10.66, $p < 0.0001$). All patients showed improvement on MRI of the knee joint. No adverse events were reported.

Conclusion: Autologous adult live cultured chondrocytes (CARTIGROW®) implantation showed good mid-term efficacy in patients with cartilage defects of the knee joint with no side-effects.

78. Pandey K, Joshi D, Joshi SD. (April to June 2022).

Management of Pseudophakic Myopia Using Implantable Phakic Contact Lens with A 'Piggy Back' Technique.

Delhi J Ophthalmol. 32 (4) 48-51.

Abstract

Purpose: We report a case of a pseudophakic myopic patient who received placement of an implantable phakic contact lens (IPCL) via a 'piggyback technique' resulting in improved visual acuity.

Case report: A 35year old male patient with both eyes pseudophakic myopia came with complaints of diminution of vision in the right eye more than his left eye. After evaluating all available optical and surgical options, he received off-label placement of a posterior chamber IPCL with a piggyback technique for the pseudophakic right eye with a manifest refraction of -20.0 Ds. Best corrected distance visual acuity improved from 20/60 to 20/30.

Conclusion: Our case demonstrates the successful use of an implantable phakic contact lens (IPCL) in a pseudophakic myopic patient by a piggyback technique, resulting in improved visual acuity. This off-label use of IPCL offers a good alternative treatment option for pseudophakic patients with high refractive error.

79. Kalane SU, Somendra S, Patwardhan S, Joshi SA, Rajhans AP, Joshi RV. (May 2022)

Clinical Profile and Outcome of Respiratory Syncytial Virus-Infected Neonates—A Single Center Experience.

Journal of Neonatology. 36(2):95-98. doi:10.1177/09732179221100662

Abstract

Respiratory syncytial virus (RSV) has been identified as a leading cause of lower respiratory tract infections in young children and elderly. Limited data are available on the clinical profile and outcome in neonates from India. We describe clinical profile and outcome data of neonates infected with RSV. A total of 14 neonates with acute respiratory illness (ARI) requiring newborn intensive care unit (NICU) admission were tested for respiratory virus infection. All 14 (100%) tested positive for RSV-A infection. Of these positive cases, 11 (78.57%) were NICU graduates. Cough, cold, and respiratory distress was observed to be the chief complain in 13 (92.85%) neonates. All except 2 required respiratory support. Total duration of respiratory support and hospital stay was 7 (3-12) and 8 (5-14) days, respectively. All the RSV-infected patients showed complete recovery. We observed that predominantly NICU graduates were susceptible to RSV illness with a slight male preponderance. Amongst infected, majority presented with ARI requiring respiratory support. The severity was more in NICU graduates who were born very preterm.

80. Patil SB, Kurwale NS, Jagtap SA, Joshi A, Deshmukh Y, Nilegaonkar S, Bapat D, Chitnis S. (May 2022)

Clinical profile and outcomes of epilepsy surgery in children from a tertiary epilepsy care center in India.

European Journal of Paediatric Neurology. 38:13-19.

Abstract

Introduction: The present study aims to describe epilepsy surgery outcomes in the pediatric population from a tertiary center in India.

Methodology: Children less than 18 years who underwent epilepsy surgery between June 2015 and December 2019 for whom at least a 1-year follow-up was available, were retrospectively evaluated for clinical presentation, radiology, surgical intervention, and seizure outcomes.

Observations: Out of a total of 355 epilepsy surgeries performed, 242 were in the pediatric group (140 males, 80 females). The mean age at surgery was 9.4 years ±4.8 years (range 4 months–18 years). The mean duration of epilepsy was 5.64 years ±3.91 (range 2 months–17 years). 126 patients experienced daily seizures, 45 weekly and 39 reported monthly seizures. Six had refractory status epilepticus. All the patients were on multiple anti-epileptic drugs (AEDs): the mean number of AEDs was 3.27 ± 0.98 (range 2–7 AEDs). Focal seizure was the most common seizure type seen in 72.27% of children (159/220). The most frequent etiology was focal cortical dysplasia (70), followed by bilateral parieto-temporo-occipital gliosis (48). All the patients underwent standard pre-surgical evaluation. Eleven patients needed stage 2 evaluation (intracranial EEG). The different surgeries performed were electrocorticography (ECOG) and navigation-guided resection (65), anterior temporal lobectomy and hippocampectomy (ATLAH) (48), functional hemispherotomy (39), callosotomy (28), disconnection surgeries (16), and multilobar resection (12). Twelve patients underwent more than one surgery. The patients were followed up between a minimum of 12 months and a maximum of 66 months (median 32 months; IQR 20 months). Engel class 1 outcome was observed in 81.38% in definitive surgeries. Outcomes of temporal lobe (TL) surgeries (92.3%) were better compared to hemispheric (87.17%) and extratemporal lobe (ETL) surgeries (75.32%). We encountered unexpected transient motor deficits in 2 patients and culture-proven meningitis in 8 patients. Post-surgery drug freedom (P-value 0.003) was the most important factor for better developmental, cognitive and behavioral outcomes.

Conclusion: Epilepsy surgeries are safe and seizure outcomes are excellent in properly selected cases with thorough presurgical evaluation. Early referral to a tertiary epilepsy center is needed for timely intervention.

81. Kapoor N, Bhattacharya S, Agarwal N, Das S, Bantwal G, **Deshmukh V**, Kalra S. (May 2022)

Subclinical Kwashiorkor in Adults: A New Age Paradigm.
Indian Journal of Endocrinology and Metabolism. 26(3):213-222.

Abstract

Childhood protein-energy undernutrition (PEU) is a well-recognized problem and therefore a lot of work has been done to identify and manage paediatric PEU. Though there have been several reports of low protein consumption in adults from developing countries, PEU and its subtle forms (subclinical PEU) are not yet recognized as adult disorders. Physicians and public perception do not favour easy recognition and action. In this review, the authors provide a scoping review of the existing literature on this entity providing insights into its recognition, pathogenesis and management. Adult subclinical PEU is an enormous under-recognized challenge that can have detrimental consequences if not recognized and corrected in time. PEU has grave health and economic impact on the patient and society. Therefore, it is important to recognize subclinical PEU and prevent its progression to full-blown form.

82. Mahajan A, Bakhshi S, Seth R, Verma N, Mandal P, Singh M, Jain S, Radhakrishnan V, **Kanvinde S**, Arora RS, Dinand V. (May 2022)

Hodgkin Lymphoma in Children Under 5 Years: Do They Behave Differently?
Journal of Pediatric Hematology/Oncology. 44(4):186-190.

Abstract

The median age of presentation for Hodgkin lymphoma (HL) is lower in developing countries with a higher proportion under 5 years of age possibly attributable to the high prevalence of Epstein-Barr virus-driven disease. It is unclear whether the clinical presentation and outcomes of this cohort are different with concern regarding late effects being most pronounced in this age group. We report the outcome of children under 5 years of age enrolled in the InPOG-HL-15-01, the first multicentric collaborative study for newly diagnosed children and adolescents with HL from India. Thirty-five (9%) of the study population was younger than 5 years with a striking male preponderance of 34:1. They were less likely to have bulky disease, mediastinal or splenic involvement. The outcomes appear to be at least as favourable as in the older patient group. Efforts need to be made to evolve treatment strategies that spare this very young cohort from potential late effects.

83. Kulkarni R, Pujari S. (May-June 2022)

COVID-19-Associated Mucormycosis: What Neurologists Should Know?
Ann Indian Acad Neurol. 25(3):330-331 - No abstract available.

84. Prayag PS, Patwardhan S, Panchakshari S, Rajhans PA, Prayag A. (May 2022)

The Dominance of *Candida auris*: A Single-center Experience of 79 Episodes of Candidemia from Western India.
Indian J Crit Care Med. 26(5):560-563.

Abstract

Introduction: Invasive candidiasis is a serious infection seen in hospitalized or immunocompromised patients. Mortality rates for candidemia can be as high as 30-60%. Candida auris is an emerging species of Candida and is increasingly becoming a global public health problem.

Methods: This was a retrospective observational study, in which we analyzed 79 episodes of candidemia. Blood cultures were done using the Bactec™ FX blood culturing instrument (Becton, Dickinson and Company Sparks, Maryland, USA). Species identification was done using VITEK® 2 YST panels (bioMérieux Inc., Durham, North Carolina, USA). Antifungal susceptibility testing was performed using VITEK® 2 AST-YSO8 panels (bioMérieux Inc., Durham, North Carolina, USA).
Results: Among the 79 episodes, the most common species was found to be C. auris (43.03% of all the episodes). Candida tropicalis was found to be the second most common species in patients admitted to our hospital with candidemia. All the isolates of C. auris were resistant to fluconazole, while 32.35 % of the isolates were also resistant to amphotericin B. Crude mortality in patients with C. auris candidemia was higher than the crude mortality for the other species.
Conclusion: This is the first study from India where C. auris was seen as the most predominant species among patients admitted with candidemia. This is a serious issue given the high rates of fluconazole resistance, mortality, and cost of therapy associated with C. auris bloodstream infections. Urgent attention needs to be diverted to infection control practices and antimicrobial stewardship programs.

85. Desai S, Choudhury J, Varghese K, Kapoor T. (May 2022)

Primary Osseous Low-grade Myxofibrosarcoma of Metatarsal Masquerading as Enchondroma: A Case Report.
J Orthop Case Rep. 12(5):35-39.

Abstract
Introduction: Low-grade myxofibrosarcoma (LGMFS) is a neoplasm of soft tissues. According to the World Health Organization, LGMFS is a malignant myofibroblastic tumor arising from deep soft tissues with potential for recurrence and late metastatic spread. The incidence estimates are 0.18/million, accounting for 0.6% of all soft-tissue sarcomas. It can directly invade the bone and metastasize to bone; however, primary osseous low-grade myxofibrosarcoma is a rare entity. Thus, recognizing atypical presentations of uncommon neoplasms are a pertinent skill for the radiologist due to significant implications for management.
Case report: A 40-year-old male with complaints of midfoot pain was referred to radiology department for imaging. Radiographs of the foot showed a lytic mildly expansile lesion in the first metacarpal with wide zone of transition and no sclerotic margin or matrix calcification. Magnetic resource imaging (MRI) and computed tomography (CT) examination demonstrated well defined lobulated lesion which appeared heterogeneously hyperintense on T2W images with cortical breach, extraosseous soft-tissue component, and early rapid progressive enhancement. The radiological diagnosis of enchondroma with pathological fracture was considered. Atypical findings of early progressive enhancement and extraosseous soft-tissue component were, however, incongruous with enchondroma and possibility of an aggressive/malignant etiology was also considered. Hence, the lesion was biopsied and diagnosis of LGMFS was made and subsequently confirmed on excised specimen. Follow-up CT scan post 6 months of surgical resection demonstrated no recurrence.
Conclusion: Primary osseous LGMFS is a rare entity and radiologically mimics enchondromas. Both LGMFS and enchondromas show T2W hyperintensity. MRI features that distinguish LGMFS from enchondroma include low apparent diffusion coefficient values and slow progressive enhancement in dynamic contrast-enhanced MRI.

86. **Pujari SS**, Ojha PK, **Kulkarni RV**, et al. (April 2022)

Cerebral Venous Sinus Thrombosis (CVST) as a Complication of SARS-COV2 Infection.
Journal of Stroke Medicine. 5(1):32-39. doi:10.1177/25166085221089731

Abstract

Background and Purpose: Severe acute respiratory syndrome coronavirus 2 (SARS-COV2) infection induces a prothrombotic state frequently associated with arterial ischemic strokes. Cerebral venous sinus thrombosis (CVST) is also reported with corona virus disease-19 (COVID-19) but a large cohort study is lacking. Our aim was to study the characteristics, treatment response, and outcomes of CVST occurring in association with COVID-19 (COVID-CVST) and the causal relationship with COVID-19.
Methods: Data of 34 patients admitted in COVID facility and suffering from CVST and SARS-COV2 infection was studied with respect to their clinic-radiological and lab features, predisposing factors, treatment, and outcome.
Observations and Results: 15 patients with CVST were detected positive for COVID but remained asymptomatic for the same. 14 patients had CVST along with symptoms of COVID, whereas 5 had CVST after recovery from COVID, at an average of 18 days after COVID-19. 4 patients were on aspirin as prophylaxis against thrombo-embolic events. The number of males exceeded females (22:12), conventional risk factors were seen in only 8 patients (postpartum state-3, alcohol abuse-2 and anemia-3), whereas the majority (26/34) showed none of them. The mean serum homocysteine level was normal and antiphospholipid antibody was tested normal in the assessed subjects. D-dimer and C reactive protein were elevated in all. 4 symptomatic patients who suffered from severe pneumonia died because of systemic complications.
Conclusion: COVID-19 predisposes to CVST and the outcome is related to the severity of COVID pneumonia. CVST related to COVID occurs during or after a few weeks of COVID pneumonia and can also be seen in asymptomatic SARS-COV2 infection. COVID-19 can occur independently or in association with traditional thrombotic risk factors which increase the risk and severity of CVST in COVID. If recognized early, CVST associated with COVID can usually be treated effectively to achieve a very good outcome.

87. **Jagtap SA, Patil S,** Joshi A, Kurwale N, Jain V, Deshmukh Y. (April 2022)

Rituximab in rasmussen's encephalitis: single centre experience and review of literature
Epilepsy & Behavior Reports. 19:1-6.

Abstract
Rasmussen's encephalitis (RE) is a rare chronic inflammatory disease of the brain resulting in unilateral hemispheric atrophy with drug-resistant focal epilepsy associated with a variable degree of progressive hemiparesis and cognitive decline. The precise etiology of RE is unknown but presumed to have a neu-roinflammatory pathobiological basis. Only surgery halts progression of the disease, but may occur at the expense of a fixed but otherwise inevitable neurological deficit. Therefore, the question of medical management is an important consideration. Reports of rituximab use in patients with RE were presented at the American Epilepsy Society annual meeting in 2008. Good published evidence for its usage has been very slow to emerge since then. However, rituximab continues to be listed in discussions of treatment options for patients with RE, though other monoclonal antibodies have since been used with comparable outcomes. We describe a series of nine patients including two with adult-onset RE. Rituximab was used early in the disease course (range 1–108 months; mean 32 months). Of nine patients with RE, there was significant benefit in their seizure burden with rituxamab. Seizure freedom occurred in 3 patients. Epilepsia partialis continua (EPC) was present in 4/9 and no focal motor deficit noted in 4/9. No progression of a neurological deficit was present in 2/9 and evidence of progression with neuroimaging was terminated with rituxamab in 5/9 supporting early use of rituxamab in patients with RE.

88. Joshi R, Kalane S, Kulkarni A. (April 2022)

Severe fetal and mild hemolytic disease of newborn: a paradoxical presentation of maternal anti-E antibody.

The Egyptian Journal of Haematology. 47(2):158-9.
Available from: http://www.ehj.eg.net/text.asp?2022/47/2/158/358017

Abstract
Maternal antibody production is stimulated when fetal red cells are positive for an antigen absent on mother's red cells. Alloimmune hemolytic disease of fetus and newborn due to anti E is uncommon. We report a case of anti-E hemolytic disease in a neonate who had severe fetal and mild neonatal hemolytic manifestations. The neonate was treated with phototherapy. He also received intravenous immunoglobulin and single PCV transfusion.

89. Kalane S, Shah D, Joshi S, Wakankar A, Rajhans A, Joshi R. (April 2022)

The clinical dilemma of sick neonates with positive COVID antibodies–A case series from India.
Journal of Clinical Neonatology. 11(2):139-42.
Available from: https://www.jcnonweb.com/text.asp?2022/11/2/139/343424

Abstract
In the face of the emergence of COVID-19, the multisystem inflammatory syndrome in neonates, which is associated with severe acute respiratory syndrome-related coronavirus, has increasingly been reported. The clinical presentation and evolution of multisystem inflammatory syndrome (MIS) mimics neonatal diseases such as sepsis. Because of the similarities, these cases present clinical and laboratory peculiarities that necessitate distinguishing them from more common neonatal illnesses to reach a consensus on this new disease in the future. Here, we present two cases from India in which neonates had MIS-like manifestations but were later diagnosed with sepsis and metabolic disorder, posing a management dilemma.

90. **Prayag PS, Purandare BD, Patwardhan SA, Pairaiturkar PP, Rege AJ, Bhave AV, Panchakshari SP, Raja PT**, Melinkeri AS, **Prayag AP**. (April 2022)

COVID-19 Associated Vertebral Osteomyelitis Caused by Aspergillus Species—A Case Series.
Indian Journal of Orthopaedics. 56:1268–1276.

Abstract
Coronavirus Disease (COVID-19) associated fungal infections including pulmonary aspergillosis, mucormycosis and other invasive fungal infections have been increasingly described in the current pandemic. Aspergillus osteomyelitis is a rare clinical form of aspergillosis. Most cases of Aspergillus osteomyelitis are reported in immunocompromised patients. We describe four cases of vertebral osteomyelitis caused by Aspergillus species in the post COVID-19 setting. To the best of our knowledge, Aspergillus vertebral osteomyelitis has not been described in the post COVID-19 setting. None of the four patients described in this series were immunocompromised and all of them had received steroids during their hospitalization for COVID-19 pneumonitis. Vertebral osteomyelitis caused by Aspergillus species is a rare clinical manifestation of Aspergillosis. It requires a high index of suspicion and prompt efforts to establish a diagnosis. For a clinician involved in assessing a patient with Spondylodiscitis, the work up must not be limited to testing for Tuberculosis. Every attempt must be made to establish the microbiological diagnosis. Combined medical and surgical management is generally needed for Aspergillus osteomyelitis.

91. Murthy R. (April 2022)

Intraoperative use of C-arm fluoroscope for removal of gun pellet in the orbit.
Indian J Ophthalmol Case Rep. 2:554-6

Abstract
Gun pellet injury is rare but devastating to the eye. Airgun pellets made of lead can ricochet between the orbital bony walls and can damage the intraocular structures, even causing loss of vision. These pellets can get displaced in the orbital fat during surgical manipulation. Intraoperative

CT scan is not readily available in hospitals; however, C-arm fluoroscopy is readily available in most setups. We used a C-arm fluoroscope and three instruments (i.e., two malleable retractors and a periosteal elevator) for locating and removing the pellet successfully in two cases, which to the best of our knowledge has not been reported before.

92. Mutalik S, Nikam B, **Salunke T**. (April 2022)

Localized Follicular Mucinosis in a Child Treated Successfully with Pimecrolimus and Targeted Phototherapy.
Case Reports in Dermatology. 14(1):84-7.
Abstract
Follicular mucinosis (FM)/alopecia mucinosa is not commonly seen in children. There are a limited number of case reports, and its prognosis and long-term outcome are unpredictable. We describe a case of FM in a 3-year-old child, which was confirmed on histopathology. The lesion resolved with topical pimecrolimus cream and targeted phototherapy with an excimer lamp and has not recurred.

93. Vij N, **Ranade AS**, Belthur MV. (April 2022)

Progressive Ankle Subluxation Following Panfibular Osteomyelitis Requiring Fibular Resection.
Cureus. 14(4):e24112.
Abstract
A 10-month-old boy presented with fever, a swollen left leg, and septicemic shock. He was diagnosed with panfibular osteomyelitis. Failure of combined medical and surgical treatment to achieve source control necessitated fibular resection. He subsequently developed a progressive superolateral subluxation of his left ankle, valgus deformity, and brace intolerance. Tibiotalar arthrodesis resulted in a stable plantigrade ankle, excellent weight-bearing ability, and a minor leg-length discrepancy at the 14-month postoperative follow-up.

94. Valsangkar R, Jog S, Date J, Shivde S. (April 2022)

Ureteric Stone Containing Gas: First Case Report with Review of Cases of Urolithiasis with Gas within the Stone and Its Clinical Implications.
Open Journal of Urology. 12(4):203-208.
Abstract
We report the first case of a ureteric stone containing gas. This rare stone with gas within it was found during the management of a diabetic patient with urosepsis as the initial presentation. Literature review of cases of renal stone containing gas, mechanisms of gas within the stone, and clinical implications of stone containing gas are discussed. Also, a new terminology is proposed to describe this phenomenon.

95. Rege S, **Chavan D**, Soman R, Joe G. (April 2022)

"Locking in" a rare pathogen.
Indian Journal of Medical Microbiology. 40(2):311-314.
Abstract
Since its identification as a unique species in 1982, Escherichia hermannii has only recently been implicated as a pathogenic organism in human diseases. Literature search indicates removal of hemodialysis catheter as being essential to the success of treatment for bacteremia with this organism. However, having no alternative access for hemodialysis led to the attempt to salvage the catheter with the use of Antibiotic lock therapy. This case highlights Antibiotic lock therapy as an indication in Escherichia hermanii Catheter related Bloodstream infection.

96. GG, Saumoy M, **Bapaye A**, Dashatwar P, Aghaie Meybodi M, Lopez AC, Sanaei O, Yousaf MN, Jovani M, Ichkhanian Y, Brewer Gutierrez OI, Kumbhari V, O'Rourke AK, Lentsch EJ, Elmunzer BJ, Khashab MA. (April 2022)

Zenker's peroral endoscopic myotomy, or flexible or rigid septotomy for Zenker's diverticulum: a multicenter retrospective comparison.
Endoscopy. 54(4):345-351.

Abstract

Background: Treatment of Zenker's diverticulum has evolved from open surgery to endoscopic techniques, including flexible and rigid endoscopic septotomy, and more recently, peroral endoscopic myotomy (Z-POEM). This study compared the effectiveness of flexible and rigid endoscopic septotomy with that of Z-POEM.

Methods: Consecutive patients who underwent endoscopic septotomy (flexible/rigid) or Z-POEM for Zenker's diverticulum between 1/2016 and 9/2019 were included. Primary outcomes were clinical success (decrease in Dakkak and Bennett dysphagia score to ≤ 1), clinical failure, and clinical recurrence. Secondary outcomes included technical success and rate/severity of adverse events.

Results: 245 patients (110 females, mean age 72.63 years, standard deviation [SD] 12.37 years) from 12 centers were included. Z-POEM was the most common management modality (n = 119), followed by flexible (n = 86) and rigid (n = 40) endoscopic septotomy. Clinical success was 92.7 % for Z-POEM, 89.2 % for rigid septotomy, and 86.7 % for flexible septotomy (P = 0.26). Symptoms recurred in 24 patients (15 Z-POEM during a mean follow-up of 282.04 [SD 300.48] days, 6 flexible, 3 rigid [P = 0.47]). Adverse events occurred in 30.0 % rigid septotomy patients, 16.8 % Z-POEM patients, and 2.3 % flexible septotomy patients (P < 0.05).

Conclusions: There was no difference in outcomes between the three treatment approaches for symptomatic Zenker's diverticulum. Rigid endoscopic septotomy was associated with the highest rate of complications, while flexible endoscopic septotomy appeared to be the safest. Recurrence following Z-POEM was similar to flexible and rigid endoscopic septotomy. Prospective studies with long-term follow-up are required.

97. Deo AS, **Kashyapi R**, Joshi V, Balakundi P, Raman P. (April 2022)

Predictors of peri-operative cardiac events and development of a scoring tool for patients with chronic kidney disease undergoing non-cardiac surgeries: A prospective observational multicentre study.
Indian J Anaesth. 66(4):278-289.

Abstract

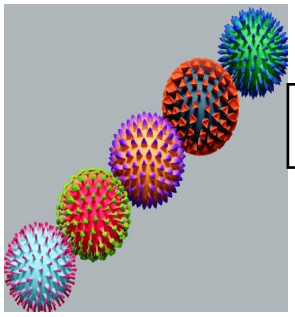
Background and aims: Cardiovascular diseases are the leading causes of morbidity and mortality in chronic kidney disease (CKD) patients. Our aim was to derive predictors of cardiac morbidity, mortality, cardiac complications and to develop/validate a scoring tool in patients with CKD undergoing non-cardiac surgery.

Methods: A prospective observational multicentre study was done on 770 patients with CKD. The primary outcome ("Event") was one or more than one of sudden cardiac death, pulmonary oedema, acute coronary syndrome, arrhythmia and 30-day mortality. Secondary outcome was hypertension and hypotension. Predictors of cardiac risk were identified. A scoring tool was developed on the 2018 dataset and was validated on the 2019 dataset.

Results: The overall incidence of cardiac events was 290 (37.66%) whereas the incidence of major adverse cardiac and cerebrovascular events was 15.04%. Mortality due to cardiac cause was 13 (1.68%). On multivariate regression analysis, seven perioperative variables had significant

association with increased risk of events: age > 65 years (P = 0.004), metabolic equivalents (METS) ≤4 (P≤0.032), emergency surgery (P =0.032), mean arterial pressure >119 (P = 0.001), echocardiographic scoring (P = 0.054), type of anaesthesia (P ≤ 0.0001) and type of surgery (P = 0.056). Using these variables, a risk stratification tool was developed. C statistics showed favourable predictive accuracy (0.714) and the model showed good calibration.

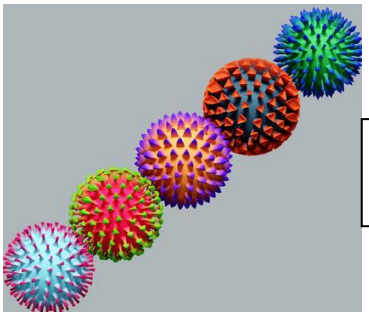
Conclusion: This risk scoring tool based on preoperative variables will help to predict the risk of events in high-risk CKD patients undergoing non-cardiac surgery. This will help in better counselling and optimization.



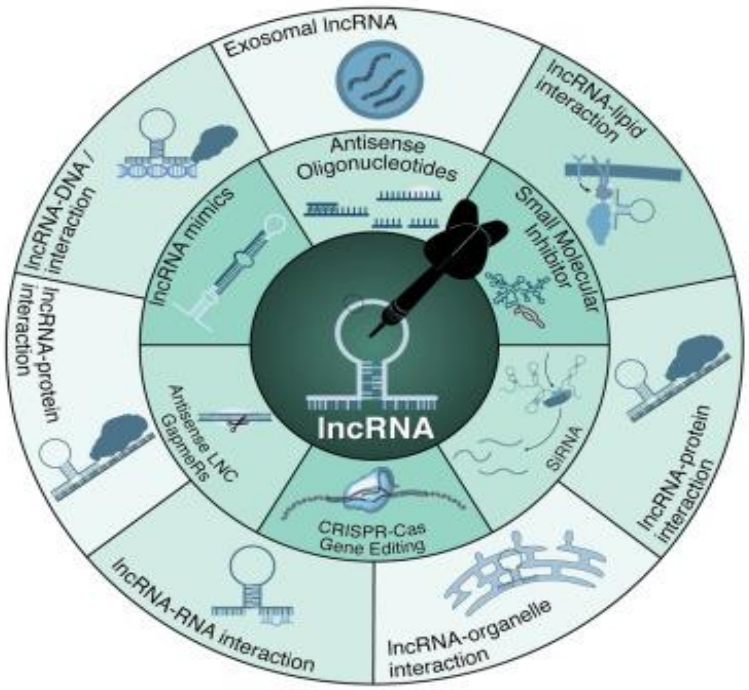
Training, CMEs and educational events

Topic	Date	Speaker
Clinical research amid the ongoing permacrisis: Training-cum-seminar program in guidelines, principles and rules for clinical research Organizers – Dr Pethe V. (DMH, Pune) and Dr Ghooi R. (ERI, Pune) Co-organizer – Dr. Amrita P. Prayag (DMH, Pune) Speaker technical support – Dr. Deepchand H. Agre	20 November 2022	Patron, support and Director Dr. Dhananjay S. Kelkar Meeting moderator – Dr. Amrita P. Prayag Speakers – (Topic) – 1. Dr Vaijayanti V. Pethe (Preamble) 2. Dr Sameer Jog (ICH-GCP guidelines – R1 and R2 with clinical scenarios) 3. Dr Ravindra Ghooi (Rules and regulations in clinical research) 4. Dr Mohini Barde (ICMR guidelines for biomedical and health research involving human participants 5. Dr Sarita Mulkalwar (SAE reporting and causality analysis) Co-ordination and logistics – Dr Shweta Chitaranjan and RD CRC team - Dr Deepali, Mrs Varada, Dr Tejashri and Mrs Shilpa
In-house research presentation meeting: A mixed bag theme of Covid and non-Covid research during the past 2 years of the pandemic Organizers – Dr. Amrita P. Prayag and Dr. Vaijayanti V. Pethe Speaker technical assistance - Dr. Deepchand H. Agre	3 July 2022	Patron, support and Director Dr. Dhananjay S. Kelkar Meeting moderator – Dr. Amrita P. Prayag Speakers – (Topic) – 1. Dr Vaijayanti V. Pethe (Preamble) 2. Dr Shilpa Kalane_(IHR 398 and IHR 432)

		3. Dr. Shweta Panchakshari_(IHR 405 and 451) 4. Dr. Sachin Palnitkar_(IHR 402) 5. Dr Sumant Patil_(IHR 433) 6. Dr Yogesh Panchwagh_(IHR 453) 7. Dr Rahul Kulkarni_(IHR 372) 8. Dr Ashish Babhulkar_(IHR 412) 9. Dr Sonali Deshmukh_(IHR 421) Meeting reminders and coffee co-ordination: Dr Shweta A Chitharanjan



In-house research program



Plumbing mysterious RNAs in “dark genome” for the conquest of human diseases [Reference: Review - Molecular Therapy Journal, May 2023]

IN-HOUSE RESEARCH AT-A-GLANCE

NUMBER OF PROJECTS REVIEWED BY SAC AND EC IN DIFFERENT THERAPEUTIC AREAS

[456 TO 496 ; N = 41]

COVID PIVOTED RESEARCH

S. NO.	DEPARTMENT	NUMBER OF PROJECTS REVIEWED [N = 2]
1.	CCM/ICU	1
2.	ANESTHESIA	1

NON-COVID RESEARCH

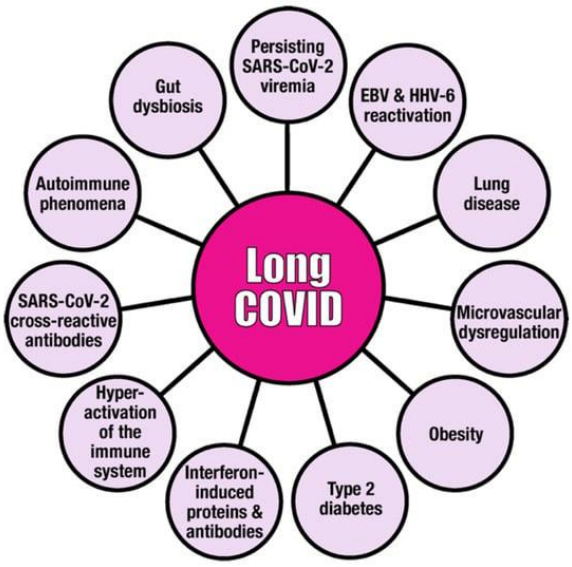
S. NO.	DEPARTMENT	NUMBER OF PROJECTS REVIEWED [N = 39]
1.	ONCOLOGY	4
2.	CCM/ICU	7
3.	OB/GYN	1
4.	NEUROLOGY	2
5.	EPILEPSY	2
6.	ID/MICRO	3
7.	PEDIATRICS	2
8.	ORTHOPEDICS	9
9.	NEPHROLOGY	1
10.	OPHTHALMOLOGY	1
11.	GASTROENTEROLOGY	4
12.	PHYSIOTHERAPY	1
13.	MOL DIAGNOSTICS	1
14.	SIMULATION	1

IN-HOUSE RESEARCH AT DMHRC – PROJECTS SUBMITTED FOR REVIEW BY SAC/IEC – [N = 41; IHR_2022_Apr_SG_456 to 2023_Mar_AD_496]

COVID PIVOTED RESEARCH

[N = 2]

Sr. No.	DMH project code	PI	Title of the project
1.	IHR_2022_Apr_SG_456	Dr. Snehal Gokhale	Incidence of diastolic dysfunction in patients with Covid-19 pneumonia and its effect on outcome [Rejected]
2.	IHR_2022_June_SN_463	Dr. Swapna Naik	Evolution of anesthetic management of microlaryngeal surgeries during Covid pandemic at a tertiary care hospital: our experience.



Major factors – including co-morbidities – that may be involved in the pathophysiologic mechanism of long-Covid disease. This figure illustrates that long-Covid is a multi-factorial disease and that SARS-CoV-2, EBV and HHV-6 are viral contributors to its development, progress, duration and/or severity [Reference – Vojdani A. et al, Viruses 2023]

NON- COVID RESEARCH – [N = 39]

[* Collaborative studies**]**

S. No.	DMH project code	PI	Title of the project
1	IHR_2022_Apr_AT_457*	Dr. Anup Tamhankar	Identification, validation and establishment of dormancy and recurrence biomarker panel for chemotherapy-induced dormant breast tumor
2	IHR_2022_Apr_PR_458*	Dr. Prasad Rajhans	Salt-based Or baLanced solUtion. Trends Existing in Indian intensive care units – A multi-centre prospective, observational cohort study (SOLUTE study)
3	IHR_2022_Apr_AB_459*	Dr. Amol Bapaye	International Multicenter registry of patients with hirschsprung's disease undergoing Per Rectal Endoscopic Myotomy (PREM)
4	IHR_2022_Apr_AB_460*	Dr. Amol Bapaye	Direct endoscopic necrosectomy versus endoscopic step-up approach after endoscopic drainage of walled-off pancreatic necrosis (WON)
5	IHR_2022_May_SP_461*	Dr. Sachin Palnitkar	Developing an AI based model for prediction of outcome for patients with Cirrhosis (Cirrhosis Outcome Prediction by AI- COPA Study)
6	IHR_2022_June_SN_462	Dr. Supreeth RN	Clinical profile and treatment outcomes of patients of double and triple expressor difuse large B cell lymphoma: A Retrospective study
7	IHR_2022_June_AT_464*	Dr. Anup Tamhankar	Development and evaluation of Human Chimeric Antigen Receptor- Macrophages (hCAR-Ma) in Human breast cancer organoid platform
8	IHR_2022_June_AR_465*	Dr. Ashish Ranade	Development of a new patient reported outcome measure for children with lower limb deformities – Field Testing of LIMB-Q Kids.
9	IHR_2022_July_AP_466	Dr. Aarti Parsule	Bilateral Choroidopathy As An Initial Presentation Of Systemic Lupus Erythematosus(SLE) – Case report
10	IHR_2022_July_SP_467	Dr. Sachin Palnitkar	Profile of autoimmune hepatitis and its treatment outcomes in a tertiary care hospital- A retrospective study.
11	IHR_2022_July_RK_468	Dr. Rahul Kulkarni	A retrospective analysis of Cerebral Venous Sinus Thrombosis.

S. No.	DMH project code	PI	Title of the project
12	IHR_2022_July_SG_469	Dr. Snehal Gokhale	Retrospective study of patient with acute ischemic stroke who received thrombolysis following CT perfusion mismatch
13	IHR_2022_Aug_SP_470	Dr. Sandeep Patil	Reasons for delay in seeking epilepsy surgery in patients with drug resistant epilepsy.
14	IHR_2022_Sept_SN_471	Dr. Sunil Nadkarni	Ex vivo expansion of surgically removed, normally discarded, disc tissue and characterization of the cells for research purposes [Rejected]
15	IHR_2022_Sept_GG_472*	Dr. Girish Godbole	A study to evaluate the feasibility of using an ovulation tracking device named O'tracker as a tool to predict the fertility window (O'tracker is a Smart Healthcare IoT solution that brings personalized ovulation tracking with support from Gynaecologists)
16	IHR_2022_Sept_NK_473	Dr. Nilesh Kurwale	Study of outcomes and superiority of multimodal fusion in individuals who have undergone epilepsy surgery for focal cortical dysplasia.
17	IHR_2022_Sept_NM_474	Dr. Nikita Mankar	Effect of withholding feeds on transfusion associated gut injury in preterm infants [Rejected]
18	IHR_2022_Sept_AB_475	Dr. Ashish Babhulkar	Shoulder hemiarthroplasty: Outcomes and long-term survival analysis.
19	IHR_2022_Sept_AB_476	Dr. Ashish Babhulkar	Retrospective review of Arthroscopic treatment for instability in more than 60 year old patients treated with bankart repair or Latarjet procedure.
20	IHR_2022_Oct_AM_477	Dr. Atul Mulay	Impact of pandemic on the decision and histology outcomes of percutaneous native kidney biopsy: A retrospective study
21	IHR_2022_Oct_PM_478	Dr. Priyanka Mahale	A retrospective study to know the outcome of patients who were initiated on non-invasive ventilation in emergency department.
22	IHR_2022_Oct_UK_479	Dr. Amruta Beke	Retrospective analysis to assess the efficacy of damage control surgery vs primary resection anastomosis in patients of mesenteric ischaemia [Rejected].

S. No.	DMH project code	PI	Title of the project
23	IHR_2022_Oct_RK_480*	Dr. Rahul Kulkarni	Leveraging AI for stroke analysis
24	IHR_2022_Nov_PP_481	Dr. Parikshit Prayag	Therapeutic drug monitoring of isavuconazole: Lessons learnt from a real life setting in a tertiary care center in India
25	IHR_2022_Nov_PM_482	Dr. Priyanka Mahale	Prospective study of factors associated with pre-Hospital delay in patients with Acute Coronary Syndrome.
26	IHR_2022_Dec_PM_483	Dr. Priyanka Mahale	Prospective observational study to characterize indications, methods, medications, success rates, intubator characteristics, and associated event rates of endotracheal intubation in emergency department.
27	IHR_2023_Jan_AB_484	Dr Ashish Babhulkar	Functional outcomes and associated complications after bilateral single stage arthroscopic rotator cuff repair.
28	IHR_2023_Jan_NA_485	Dr Neha Agashe	An interventional study to protocolize Physiotherapy treatment for PD patients
29	IHR_2023_Jan_AB_486	Dr Ashish Babhulkar	Retrospective study of functional outcome and failure rate for shoulder instability in above 50 years old patients treated with Arthroscopic Latarjet Procedure
30	IHR_2023_Jan_AB_487	Dr Ashish Babhulkar	Retrospective study of functional outcome and failure rate for shoulder instability in above 50-year-old patients treated with arthroscopic bankart repair.
31	IHR_2023_Feb_KM_488	Dr. Keyur Mahajan	Correlation of laboratory profile and clinical features in dengue viral illness in the pediatric population - A retrospective analysis.
32	IHR_2023_Feb_VU_489*	Dr. Vaibhavi Upadhye	The Vital Anesthesia Simulation Training (VAST) Foundation Year for anesthesia trainees: case study research exploring the influence of context on curriculum delivery [Prospective study]
33	IHR_2023_Feb_AS_490*	Dr. Avijan Sinha	Investigation of Gait Analysis and Its Measurement Technique
34	IHR_2023_Feb_SP_491	Dr. Sampada Patwardhan	Candida auris – Comparison of Sensititre YeastOne and Vitek 2 AST systems for antifungal susceptibility testing with special reference to issues with caspofungin susceptibility testing – A single centre experience [Retrospective study]

S. No.	DMH project code	PI	Title of the project
35	IHR_2023_Feb_PG_492	Dr. Pranjal Gupta.	Post-operative electrolytes and patient outcomes in emergency Abdominal surgery – A retrospective study.
36	IHR_2023_Feb_DD_493	Dr. Dnyaneshwar Diwane	Study of colistin resistant gram negative Organism in hospitalized patients – a retrospective study
37	IHR_2023_Feb_PP_494	Dr. Parikshit Prayag	Ceftazidime-avibactam with or without aztreonam versus Polymyxin based combination therapy for carbapenem resistant Enterobacteriaceae: A retrospective analysis
38	IHR_2023_Mar_AB_495	Dr. Ashish Babhulkar	An Assessment of Post-surgical outcomes of Posterior labral injuries and Articular cartilage injuries of glenoid, with or without ACI. Retrospective study
39	IHR_2023_Mar_AD_496	Dr. Aditi Dastane	Comparison of blot technique with Immunofluorescence test for detection of Antinuclear antibodies in autoimmune diseases and connective tissue disorders.

PharmD projects [N =7] December 2022

1. **Name of Guide and Department:** Dr. Atul Mulay, Nephrology, DMH.
   Name of student's organization: Modern College of Pharmacy, Nigdi, Pune.
   Title of the project: Assessment of drugs dose adjustment in chronic kidney disease patients in tertiary care hospital.

2. **Name of Guide and Department:** Dr. Ashwini Joshi, Internal Medicine, DMH.
   Name of student's organization: Modern College of Pharmacy, Nigdi, Pune.
   Title of the project: Assessment of Anti-Microbial agent usage pattern as per the given susceptibility testing report

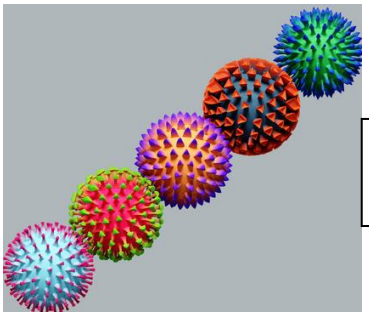
3. **Name of Guide and Department:** Dr. Rahul Kulkarni, Neurology, DMH.
   Name of student's organization: Modern College of Pharmacy, Nigdi, Pune.
   Title of the project: Study of Onset Time, Risk Factors, and Prescription Pattern in Patients with Stroke.

4. **Name of Guide and Department:** Dr. Shilpa Kalane, Pediatrics, DMH.
   Name of student's organization: Modern College of Pharmacy, Nigdi, Pune.
   Title of the project: Design, development and validation of screening tool for IV medications incompatibility in neonates.

5. **Name of Guide and Department:** Dr. Shilpa Kalane, Pediatrics, DMH.
   Name of student's organization: Modern College of Pharmacy, Nigdi, Pune.
   Title of the project: To design, develop and validate the Screening tool for minimizing Prescription error in neonates.

6. **Name of Guide and Department:** Dr. Narendra Javadekar, Internal Medicine, DMH.
   Name of student's organization: Modern College of Pharmacy, Nigdi, Pune.
   Title of the project: To study incidence, cost analysis and drug utilization pattern of anticoagulants in patient with VTE.

7. **Name of Guide and Department:** Dr. Rahul Kulkarni, Neurology, DMH.
   Name of student's organization: Modern College of Pharmacy, Nigdi, Pune.
   Title of the project: To evaluate the drug utilization and analysis of Anti-epileptic drugs at tertiary Care hospital.



Clinical trial research program

Sponsored research

The Internet of Things (IoT) is growing at an unprecedented rate and is transforming the way we live, work, and interact with the world around us - bringing new opportunities and challenges in the realm of technology.

CLINICAL TRIAL RESEARCH PROGRM AT DMHRC – PROJECTS REVIEWED BY SAC/IEC AND THEIR STATUS

A] TOTAL NUMBER OF PROJECTS REVIEWED – [N = 20]

[CT_2022_Apr_SM_666 to CT_2023_Mar_RK_685]

PROJECT STATUS	NUMBER OF PROJECTS [N= 20]
Ongoing	08
Pending	08
Rejected/ Terminated	04

Pending status – The projects have not been given final approval in view of lack of either administrative and/or regulatory documents in the context of clinical trials. Some of the documents and items include – Final CTA, EC review fees, final ICFs, CTRI notification, DCGI submission/ approval notification.

B] STATUS OF CLINICAL TRIAL STUDIES – UPDATED AS OF MARCH 2023

Ongoing and inactive projects –

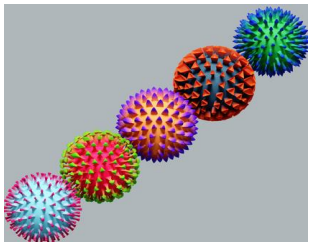
Total number of studies N=	42
Studies having ongoing patient activities N=	33
Inactive studies – formal close-out from sponsor awaited N=	09

C] THERAPEUTIC AREAS OF ONGOING PROJECTS – [N= 33]

THERAPEUTIC AREA	NUMBER OF ONGOING TRIALS [N=33]
Oncology	16
Neurology	07
Endocrinology	04
Cardiology	02
Epilepsy	01
Ob-Gyn	01
Rheumatology	01
Joint replacement	01

D] CLOSED-OUT PROJECTS AND THEIR THERAPEUTIC AREAS [N= 21]

THERAPEUTIC AREA	NUMBER OF TRIALS [N=21]
Oncology	11
Neurology	03
CCM/ICU	02
Dermatology	01
Infectious Diseases	01
Medicine	01
Psychiatry	01
Rheumatology	01



DNB research program

List of DNB Research Projects – Accepted - April 01, 2022 To March 31, 2023

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
1	Dr. Bharati Sharda Yaman	Dr. Rijuta Kashyapi	Anaesthesiology	A Prospective, Randomized-controlled, Comparative Study of Two Different Sizes of Endotracheal Tube on Incidence of Postoperative Sore Throat (POST) in Adult Patients Undergoing Elective Laparoscopic Gynaecological Surgeries Involving Lithotomy Position"
2	Dr. Joshi Dipti Prakash	Dr. Jitendra Kshirsagar	Anaesthesiology	Evaluation of Duration of Intubation and Success Rate using McCoy blade Laryngoscope and Video Laryngoscope for Tracheal Intubation : A prospective comparative study
3	Dr. Pankhuri Sisodia	Dr. Shilpa Kalane	Paediatrics	Effects of delayed cord clamping on jaundice, phototherapy and early haematological status in neonates of diabetic mothers (NDMs) , born at ≥35 weeks of gestation - A Prospective Comparative Study."
4	Dr. Maheshwari Poonam Pradeep	Dr. Manjiri Ranade Joshi	Anaesthesiology	A prospective randomised controlled trial to assess the efficacy of Erector Spinae Plane Block versus standard of care for postoperative pain relief in patients undergoing lower thoracic and lumbar spine fixation surgeries
5	Dr. Desai Parth	Dr. Sumeet Pitkar	Paediatrics	A Retroprospective Cross-Sectional Study To Determine The Predictive Value Of Vasoactive Inotrope Scoring In Patients Presenting To Pediatric Intensive Care Unit
6	Dr. Makar Gursheen Bhupinder	Dr. Swapna Naik	Anaesthesiology	A prospective study comparing the analgesic efficacy of ultrasound guided Supra-Inguinal Fascia Iliaca Block (SIFIB) and Femoral Nerve Block (FNB) for positioning of patients for Sub-arachnoid block before undergoing surgical fixation of fracture neck of femur
7	Dr. Munazza Najaf Yadgiri	Dr. Bhagyashree Shivde	Anaesthesiology	A Prospective Comparative Study of induction characteristics of Propofol verses Sevoflurane for Laryngeal Mask Airway Insertion in patients undergoing elective surgery

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
				under General anesthesia
8	Dr. Anannya Mondal	Dr Prasad Walimbe	Ophthalmology	Effect of amblyopia treatment on the best corrected visual acuity in patients with anisometropic, strabismic and ametropic amblyopia in the age group of 9-18 years in a tertiary care hospital.
9	Dr. Narwade Manish Bhiku	Dr. Prasanna Khare	Anaesthesiology	A comparative study of preoperative nebulisation of Ketamine versus Magnesium sulphate in decreasing incidence and severity of postoperative sore throat in spine surgery
10	Dr. Jain Avi Vinod	Dr. Sanjay Desai	Radio Diagnosis	To Assess The Accuracy Of 3T MRI With CT Correlation In Detection And Evaluation Of Oral Cancer With Its Histopathological Correlation
11	Dr. Bhosle Chitrangad Murari	Dr. Anand Shinde	Obstetrics and Gynaecology	Retrospective Study Of Neonatal Outcome Of The Second Born Twin As Compared To The First Born Twin
12	Dr. Gandhi Shreyans Hemant	Dr. Mahesh Mone	Orthopaedics	A Retro-Prospective Observational Study To Predict The Type Of Implant To Be Used According To Preoperative Measurement Of Neck Shaft Angle On Normal Side In Unilateral Stable Intertrochanteric Femur Fracture
13	Dr. Kandoi Raksha Bharat	Dr. Pratibha Kulkarni	Obstetrics and Gynaecology	Retrospective Observational Study On Efficacy Of Office Endometrial Biopsy By Pipelle To Diagnose Endometrial Pathology In Patients With Abnormal Uterine Bleeding Undergoing Hysterectomy
14	Dr. Pawar Sagar Suryakant	Dr. Ranjit Deshmukh	Orthopaedics	Retrospective Study To Determine The Further Interventions Required After Completion Of Correction Of Idiopathic Clubfoot By The Ponseti Method And Their Incidences
15	Dr. Mir Saharuk Ali	Dr. Shridhar Kanitkar	General Surgery	A Prospective Comparative Study Of Patient Who Underwent Neck Dissection With Or Without Preservation Of Accessory Nerve Regarding Shoulder Function And Nodal Recurrence In Posterior Triangle
16	Dr. Rose Mariya George	Dr. Gouri Ranade	Emergency Medicine	A Prospective Observational Study To Compare Ease Of Technique And Analgesic Efficacy Of Femoral Nerve Block Using Ultrasound Guidance

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
				Versus Peripheral Nerve Stimulator In Patients Presenting To The Emergency Department With Proximal Femoral Bone Fracture
17	Dr. Shruti P Narkhede	Dr. Aditi Kothurkar	Anaesthesiology	A Prospective Comparative Study Of The Effect Of Single Dose Dexmedetomidine And Normal Saline On Extubation Conditions In Adult Patients Undergoing Thyroidectomy Under General Anesthesia With Endotracheal Intubation
18	Dr. Yashika Goel	Dr. Amit Parasnis	General Surgery	A Retroprospective Comparitive Study Of Quality Of Life Based On Physical, Psychosocial And Functional Aspects Of Breast Conservation Surgery And Modified Radical Mastectomy
19	Dr. Prachi Jain	Dr. Bhagyashree Bhurke	Emergency Medicine	Prospective Observational Study To Compare The Efficacy Of Standard Valsalva Maneuver And Modified Valsalva Maneuver In Regular, Narrow QRS Complex Supraventricular Tachycardia Patients Presenting To ER
20	Dr. Shinde Samruddhi Shyamsundar	Dr. Sujit Joshi	Pathology	Spectrum Of Non-Hematological Disorders With Nucleated RBCs In Peripheral Blood And Their Correlation With Clinical Outcome
21	Dr. Bansode Snehpali Bapu	Dr. Sachin Gandhi	Otorhinolaryngology (ENT)	A Prospective Observational Study To Compare The Pre-Operative And Post-Operative Airflow Between Suture Lateralisation And Laser Assisted Unilateral Posterior Cordectomy With Partial Arytenoidectomy In Bilateral Vocal Cord Palsy
22	Dr. Dudhal Suraj Kailas	Dr. Rashmi Gapchup	Paediatrics	Comparative Study Of Spo2/Fio2 Ratio To Pao2/Fio2 Ratio In Children Requiring Mechanical Respiratory Support In PICU.
23	Dr. Sree Lakshmi V	Dr. Prasad Rajhans	Emergency Medicine	A Prospective Observational Study To Assess The Reliability Of Ultrasound To Confirm Position Of Endotracheal Tube During Intubation In The Emergency Department Of A Tertiary Care Hospital.
24	Dr. Gunjan Singh	Dr. Roopali Nerlikar	Ophthalmology	Refractive Stability Following Corneal Collagen Cross-Linking In Patients With Corneal Ectasia

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
25	Dr. Aakanksha Jain	Dr. Ashwini Kulkarni	Radio Diagnosis	A Prospective Observational Study To Compare Ultrasound Strain Elastography With TIRADS In Diagnostic Evaluation Of Thyroid Nodules.
26	Dr. Apoorva	Dr. Vidyadhar Patwardhan	Ophthalmology	A Prospective Observational Study To Estimate Short Term Changes In Intra Ocular Pressure After Anti – Vascular Endothelial Growth Factor Injection Intravitreally
27	Dr. Mirjolkar Amit Suresh	Dr. Sameer Melinkeri	Hematology	Retroprospective Observational Study Of Cytogenetic Characteristics Of Philadelphia Chromosome Negative (Ph Negative) B Cell Acute Lymphoblastic Leukemia
28	Dr. Abhijit Panda	Dr. Ashish Ranade	Orthopaedics	A Prospective Comparative Observational Study To Compare Patient And Parent's Satisfaction Between Standard Bandage Sling Vs Readymade Sling Use In Paediatric Upper Extremities Fractures
29	Dr. Pallabi Datta	Dr. Vikram Oak	Otorhinolaryngology (ENT)	Prospective Observational Study To Compare The Surgical Outcome Of Endonasal Septoplasty And Extracorporeal Septoplasty In Patients With Grade II Deviated Nasal Septum
30	Dr. Payal Gupta	Dr. Gayatri Bhide	Paediatrics	A Prospective Observational Study Of Incidence Of Ventilator Associated Pneumonia In Children Admitted To Pediatric Intensive Care Unit Of A Tertiary Care Center In India
31	Dr. Divya Choudhary	Dr. Shailaja Suresh Chavan	Critical Care Medicine	A Prospective Observational Study To Determine The Effect Of Osmotherapy On Optic Nerve Sheath Diameter In Patients With Increased Intracranial Pressure In A Tertiary Care Hospital
32	Dr. Dhayanandan	Dr. Sunil Bapat	Anaesthesiology	A Prospective Comparative Study Of The Effect Of Intravenous Magnesium Sulphate To Intravenous Lignocaine On Postoperative Analgesia In Patients Undergoing Laparoscopic Cholecystectomy.
33	Dr. Rajput Indrani Prithvisingh	Dr. Asha Gokhale	Obstetrics And Gynaecology	A Retro-Prospective Observational Study To Analyze The Pregnancy Outcomes Of Intermediate Risk On First Trimester Combined Screening Test

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
34	Dr. Manju Krishna K V	Dr. Prasad Rajhans	Emergency Medicine	A Prospective Observational Study To Determine If Ultrasound Guided Measurement Of Optic Nerve Sheath Diameter, Can Predict Raised Intracranial Pressure In Patients Presenting With Signs And Symptoms Suggestive Of Raised Intracranial Pressure
35	Dr. Ketkar Nivedita Sanjay	Dr. Aarti Prabhune	Anaesthesiology	To Compare The Efficacy Of Tramadol And Dexmedetomidine In The Treatment Of Shivering In Post-Spinal Anaesthesia Patients Undergoing Arthroscopic Knee Surgery
36	Dr. Meemansa	Dr. Shilpa Kalane	Paediatrics	A Prospective Study To Determine The Effect Of Antenatal Mgso4 On Short Term Neonatal Outcomes Born At Less Than 34 Weeks Of Gestation In Indian Population
37	Dr. Madhusmita Acharya	Dr. Rajan Joshi	Paediatrics	A Prospective Observational Study To Compare The Accuracy Of Different Formulae Used To Calculate The Predicted Length Of Endotracheal Tube Insertion In Indian Children
38	Dr. Gavane Neha Vishvanath	Dr. Pramod Palhade	Anaesthesiology	A Prospective Randomised Controlled Study To Compare The Incidence Of Hemidiaphragmatic Palsy In Interscalene Block And Superior Trunk Block In Unilateral Arthroscopic Shoulder Surgeries
39	Dr. Patel Bintiben Sumanbhai	Dr. Sameer Arvind Jog	Critical Care Medicine	Correlation Of Diaphragm Ultrasound Assessment And Endotracheal Extubation
40	Dr. Kamble Suchita Sambhaji	Dr. Prashant Ravindra Mishra	Cardiology	Comparison Of Echocardiography Guided Inferior Vena Cava Distensibility Index(Ivc Di), Central Venous Pressure And Left Ventricle Outflow Tract-Velocity Time Integral(Lvot-Vti) To Ascertain Fluid Responsiveness In Patient Presenting With Hypotensive Shock
41	Dr. Karmarkar Gauri Satish	Dr. Shireesh Prabhakar Sathe	Cardiology	An Observational Study To Assess The Additive Value Of Novel Risk Factors For Coronary Artery Disease In Adults With Age Less Than 55yrs Presenting With Acute Coronary Syndrome And/Or Requiring Coronary

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
				Revascularization Procedure (Percutaneous Coronary Intervention Or Coronary Artery Bypass Grafting)
42	Dr. Kovuru Kavyasree	Dr. Girish Godbole	Obstetrics And Gynaecology	Prospective observational study of correlation between thyroid function and low ovarian reserve in women attending infertility clinic.
43	Dr. Talwalkar Pranav Yashwant	Dr. Pratibha Phadke	General Medicine	Prospective study to compare patients of Heart Failure with Preserved Ejection Fraction in males and females with respect to incidence, comorbidities and precipitating factors
44	Dr. Chikaskar Kalyani Prasad	Dr. Manisha Deshmukh	General Medicine	Prospective study to observe and analyse the Relationship between levels of serum uric acid and Metabolic Syndrome.
45	Dr. Varsha Rana	Dr. Mahesh Mandolkar	Pathology	Correlation of nerve biopsy with Nerve Conduction Velocity studies and clinical findings in evaluation of peripheral neuropathy, with special reference to vasculitic neuropathy
46	Dr. Manjeet Singh Ahlawat	Dr. Sachin Hingmire	Medical Oncology	Efficacy of oral NEtupitant & PAlonosetron in prevention of chemotherapy induced nausea vomiting
47	Dr. Anup Ganeshgouda Patil	Dr. Prasad Vasant Akole	Critical Care Medicine	Veno-Arterial Carbon dioxide gap as an outcome predictor in post-abdominal surgery Intensive Care Unit patients with shock.
48	Dr. Kanani Yash Parsotambhai	Dr. Harshal Prabhakar Gadhikar	Gastroenterology	A comparative analysis of community-associated and healthcare-associated Clostridiodes difficile infections in adult population.
49	Dr. Darandale Kajal Vijay	Dr. Atul Vasant Mulay	Nephrology	Study of association between dialysis recovery time and the type of dilayser and vascular access used for dialysis
50	Dr. Khan Mainuddin Ifthikarahmed	Dr. Balasaheb Yadavrao Pawar	Critical Care Medicine	Comparison of clinical pulmonary infection score and Lung ultrasonography for diagnosis of Ventilator-associated Pneumonia
51	Dr. Shriram Tulshiram Bhandare	Dr. Sameer Arvind Jog	Critical Care Medicine	To study diaphragmatic thickness & thickening fraction in critically ill Indian ethnicity
52	Dr. Shalvi Abhay Kamat	Dr. Amit Walimbe	General Medicine	Correlation Between The Type Of Toxin And Disease Severity In Clostridioides Difficile Disease - A Prospective Observational Study

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
53	Dr. Shah Akash Alpeshbhai	Dr. Subodh Ratnakar Shivde	Genito Urinary Surgery (Urology)	A Prospective Comparative Study Of Mini- Percutaneous Nephrolithotomy (PCNL) Using Swiss Lithoclast With And Without Suction.
54	Dr. Gaikwad Sourabh Chandrakant	Dr. Rohan Satish Valsangkar	Genito Urinary Surgery (Urology)	To Compare The Efficacy And Safety Of Mini- PERC(Mini -Percutaneous Nephrolithotomy And RIRS(Retrograde Intrarenal Surgery) In Management Of Renal Stone Of 1.5-2 CM
55	Dr. Somsindhu Ghosh	Dr. Nilesh Purushottam Mahale	Critical Care Medicine	Role Of Serum Uric Acid And Albumin Ratio To Predict The Development Of Acute Kidney Injury In Patients Admitted In Intensive Care Unit – A Prospective Observational Study
56	Dr. Nashte Viresh Vitthal	Dr. Rahul Vitthal Kulkarni	Neurology	A Prospective Observational Study To Analyse Precipitating Factors And Treatment Outcome In Myasthenia Crisis Patients, Admitted In Tertiary Care Hospital.
57	Dr. Sadhwani Divyang Ramesh	Dr. Dhananjay Shrikrishna Kelkar	Surgical Oncology	A Retrospective Study To Compare Outcomes Of Various Treatment Modalities For Stage III Epithelial Ovarian Cancer
58	Dr. Navajith A Mani	Dr. Kaustubh Dindorkar	Neuro Surgery	A Retro-Prospective Observational Study To Assess Efficacy Of Re-Vascularisation Surgery In Moya Moya Disease In Tertiary Care Hospital
59	Dr. Shilimkar Devesh Tulshidas	Dr. Sucheta Iyer	General Medicine	A Prospective Observational Study To Determine Association Between The Urinary Albumin Creatinine Ratio And Treadmill Test In Type 2 Diabetes Mellitus Patients
60	Dr. Sumanto Das	Dr. Parag Vaste	General Medicine	Study Of Non-Alcoholic Fatty Liver Disease (NAFLD) In Newly Detected Diabetes Mellitus Type 2 Patient And Its Association With Microvascular Complications
61	Dr. Kanishk Bathla	Dr. Milind Modak	Orthopaedics	Retroprospective observational comparative study of functional and radiological outcomes of proximal femur fracture treated with proximal femoral plate and proximal femoral nail
62	Dr. Latika Chelani	Dr. Ramesh Kulkarni	General Medicine	Retroprospective observational study of correlation between lactate

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
				dehydrogenase (LDH) / Adenosine deaminase (ADA) ratio and types of exudative pleural effusions
63	Dr. Dhameliya Parth Bharatbhai	Dr. Arti Rajhans	Paediatrics	A Prospective observational study to compare neonatal Sequential Organ Failure Assessment (nSOFA) score with Score for Neonatal Acute Physiology-Perinatal Extension-2 (SNAPPE-2) score in septic neonates for predicting outcomes.
64	Dr. Sooraj S Nair	Dr. Pradip Balasaheb Dalvi	Critical Care Medicine	Correlation of serum procalcitonin levels in gram positive, gram negative and candida blood stream infections, a retro-prospective observational study.
65	Dr. Sayali Harshkumar Pachore	Dr. Prasanna Khare	Anaesthesiology	Comparison of erector spinae plane block and local anaesthetic infiltration of the incision site for postoperative analgesia in percutaneous nephrolithotomy
66	Dr. Chetali K Sharma	Dr. Roopali Nerlikar	Ophthalmology	A prospective observational study to evaluate spectacle independance and Quality of vision following modified Monovision cataract surgery.
67	Dr. Jawalgikar Kasturi Digambar	Dr. Mahesh Mandolkar	Pathology	Correlation of histopathological and immunohistochemical findings with EGFR, ALK and ROS-1 in cases of non small cell lung carcinoma
68	Dr. Vienna Dias	Dr. Shilpa Kalane	Paediatrics	Early Full Enteral Feeding in Preterm Low Birth Weight Infant- A Retro Prospective Comparative Study
69	Dr. Ghorpade Yashaswini Dattatray	Dr. Rashmi Gapchup	Paediatrics	An Observational study of correlation of clinical outcomes of Blood stream Infections in Pediatric Intensive Care (PICU) with respect to the pathogen and its sensitivity
70	Dr. Ponkshe Jui Mahesh	Dr. Pratibha Kulkarni	Obstetrics and Gynaecology	Correlation of IETA Score and Endometrial Histopathology in Women with Abnormal Uterine Bleeding
71	Dr. Jagade Rachana Shekhar	Dr. Anuradha Wakankar	Obstetrics and Gynaecology	Observational study to assess the accuracy of HDP-GESTOSIS SCORE and UAPI + PAPP-A (uterine artery pulsatility index and pregnancy associated plasma protein A) in prediction of “AT-RISK” women for development of preeclampsia.
72	Dr. Tejal Ganesh	Dr. Sujit Joshi	Pathology	To study accuracy of Tru-cut biopsy in evaluation of soft tissue tumours

Sr. No.	Name Of Principle Investigator	Name Of Guide / Supervisor	Specialty / Department	Title Of Thesis Protocol
	Kurapati			
73	Dr. Prakash Athankar	Dr. Aniruddha Joshi	Radio Diagnosis	Correlate volume of penumbra to clinical outcome after thrombolysis in patients presenting with ischemic stroke.
74	Dr Rashi Thusoo	Dr Swapna Naik	Anaesthesiology	Prospective Study to Compare Efficacy of Airway Ultrasonography [Distance of Skin to Epiglottis (DSE)] With Conventional Methods [Modified Mallampati Test (MMT) and Thyromental Distance (TMD)] for Prediction of Difficult Intubation in Adult Patients

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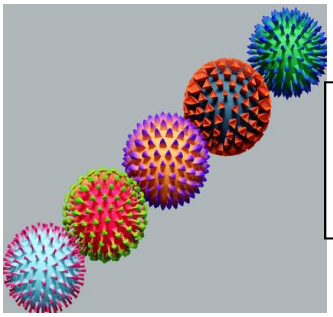

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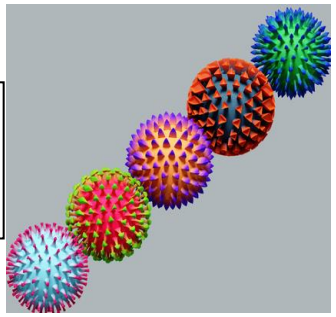

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