



AN OFFICIAL NEWSLETTER OF GMERS MEDICAL COLLEGE, GANDHINAGAR

2023: Issue-3 (July - September)



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### Welcome to GMERS Medical College, Gandhinagar

GMERS Medical College, Gandhinagar is an academic institution of repute under The Gujarat Medical Education and Research Society of Department of Health and Family Welfare, Government of Gujarat and located in the city of Gandhinagar, Capital of Gujarat State in Western India. It is one of the fastest growing Medical College of Gujarat. The institute strives to be among the top medical colleges in India in the spheres of medical education, research and

Mr. Miraj Metaliya (Student)

Ms. Rusham Kaw (Student)



Dr. Shobhana Gupta Dean GMERS Medical College, Gandhinagar

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Kitchen Corner: Spinach Banana Oats Smoothie

# From Editorial Desk: <u>Lecanemab – A New Drug for Alzheimer's Treatment</u>

Alzheimer's disease (AD) is a type of neurodegenerative disease. There is a progressive loss of neurons' structural and functional integrity in neurodegenerative diseases. Parkinson's disease, Amylotrophic lateral sclerosis, Multiple sclerosis are some other examples of neurodegenerative disease. Since there is no known way to stop the progressive degeneration of neurons, these diseases are regarded as incurable. Oxidative stress and inflammation are the two major mechanisms which usually lead to neurodegeneration.[1-3]

One of the most prevalent causes of dementia is Alzheimer's disease (AD). The cause of 60–70% of dementia cases is AD. Amnesia, a common early sign of AD, is a diminished capacity to recall recent events. As the illness worsens, individuals may experience difficulties speaking (aphasia), confusion (delirium), a lack of motivation (apathy), etc. In the US alone, approximately 5.3 million Americans have AD, of which 5.1 million are aged 65 years or older and 200,000 have younger-onset AD.[4]

The major histopathological characteristics of AD are extracellular aggregates of Aß plaques and intracellular aggregations of neurofibrillary tangles Hyperphosphorylated microtubule-associated  $\tau$  makes up NFTs. The brain's basal, temporal, and orbitofrontal neocortex regions are where A $\beta$  plaques first form. Later on, they spread to the hippocampus, amygdala, diencephalon, and basal ganglia. Clinical signs and symptoms frequently correlate with brain involvement. Αβ found throughout the mesencephalon, lower brain stem, and cerebellar cortex in critical cases.[5]

A major protein present on the plasma membrane is the amyloid precursor protein (APP). The enzyme  $\alpha$ -secretase breaks down APP to produce soluble A $\beta$ , which participates in typical synaptic signalling. The  $\alpha$ -secretase enzyme also produces APPs $\alpha$  (secreted APP  $\alpha$ )- a fragment that is extracellularly released and involved in both neuroprotection and cell-substrate adhesion. (Figure-1) Learning, memory, emotional behaviour, and neuronal survival, normal synaptic

signaling, sufficient synaptic plasticity are all associated with the presence of APPs $\alpha$ .[6] Amyloid pathogenesis starts with altered cleavage of amyloid precursor protein (APP). It was primarily broken down by  $\beta$ -secretases (BACE1) and  $\gamma$ -secretases to create altered A $\beta$  fibrils. A $\beta$ then undergoes oligomerization, diffuses into synaptic clefts, and disrupts synaptic signalling. Consequently, it polymerizes into insoluble amyloid fibrils that aggregate into plaques. This polymerization leads to activation of kinases, which leads to hyperphosphorylation of the microtubule-associated τ protein, and its polymerization into insoluble NFTs. Following the formation of plaques and tangles, the microglia around the plaques are recruited. This contributes to neurotoxicity by promoting microglial activation and inflammatory response (Figure 1).[7]

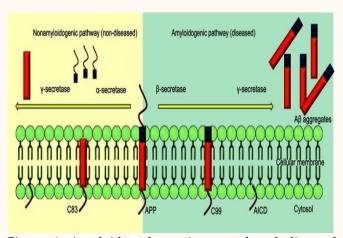


Figure 1: Amyloid pathway in normal and diseased [Image reproduced from (Tiwari S, et al 2019)]

Lecanemab is approved by the United States (US) Food and Drug Administration (FDA) for the treatment of early Alzheimer's disease (AD), (mild cognitive impairment (MCI) or mild dementia due to AD).

Lecanemab is a humanized immunoglobulin gamma 1 (IgG1) monoclonal antibody directed against aggregated soluble and insoluble forms of amyloid beta. The accumulation of amyloid beta plaques in the brain is a defining pathophysiological feature of Alzheimer's disease. So, treatment candidates should have amyloid pathology as demonstrated by amyloid positron emission tomography (PET) or cerebrospinal fluid (CSF) tests indicative of AD.

Lecanemab was approved using the accelerated pathway available to the FDA for drugs that were developed to treat a serious or life-threatening illnesses and have an effect on a biomarker considered reasonably likely to predict a clinical response, taking into account the prevalence of the condition and the availability or lack of alternative treatments. In the accelerated approval framework, a confirmatory trial is required to demonstrate clinical benefit and the agent can be withdrawn from the market if the confirmatory trial is negative.

#### **Important Fact Sheet**

- Confirm the presence of amyloid beta pathology prior to initiating treatment.
- The recommended dosage is 10 mg/kg that must be diluted then administered as an intravenous infusion over approximately one hour, once every two weeks.
- Obtain a recent (within one year) brain MRI prior to initiating treatment to evaluate for pre-existing Amyloid Related Imaging Abnormalities (ARIA).
- Dilution in 250 mL of 0.9% Sodium Chloride Injection, USP, is required prior to administration.
- Administer as an intravenous infusion over approximately one hour via a terminal low-protein binding 0.2 micron in-line filter.

#### **Adverse Drug Reactions**

- Amyloid Related Imaging Abnormalities (ARIA): It is characterized as ARIA with edema (ARIA-E) and ARIA with hemosiderin deposition. Most common adverse reactions (at approximately 10% and higher incidence compared to placebo): infusion-related reactions, headache, and ARIA-edema. Obtain an MRI prior to the 5th, 7th, and 14th infusions. If radiographically observed ARIA occurs, treatment recommendations are based on type, severity, and presence of symptoms.
- Hypersensitivity reactions: Angioedema, bronchospasm, and anaphylaxis, have occurred in patients who were treated with Lecanemab. Promptly discontinue the infusion upon the first observation of any signs or symptoms consistent with a hypersensitivity reaction, and initiate appropriate therapy.

- Infusion-related reactions: Fever and flu-like symptoms (chills, generalized aches, feeling shaky, and joint pain), nausea, vomiting, hypotension, hypertension, and oxygen desaturation.
- Others: Headache, cough, diarrhoea, rash

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Dr. Darshan J Dave Professor & Head, Department of Pharmacology

# Bedaquiline Resistance – A Big Concern for Future

Drug-resistant tuberculosis (DR-TB) is a public health threat and is difficult to cure, requiring a lengthy treatment with potent, potentially toxic drugs. The novel antimicrobial agent bedaquiline has shown promising results for patients with DR-TB, improving the rate of culture conversion and reducing TB-related mortality. However, increasing numbers of cases with acquired bedaquiline resistance (ABR) have been reported in recent years.

Since 2018 WHO has recommended using bedaquiline as a core drug in patients with MDR/RR-TB. Naturally, the widespread use of a new antibacterial drug comes with the risk of emerging resistance. As of today, several genetic mutations or resistance-associated variants (RAVs) have been linked with bedaquiline resistance, with Rv0678 and atpE being the most important ones. Rv0678 codes for the MmpR transcriptional repressor of the MmpS5-MmpL5 efflux system and its mutations are usually associated with low-level bedaquiline resistance,

also conferring cross-resistance to clofazimine and azoles. The gene atpE encodes the ATP synthase subunit C. Mutations confer high-level bedaquiline resistance.

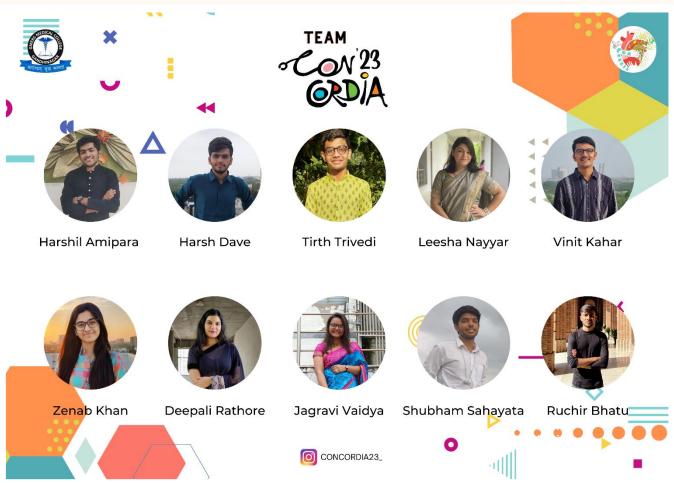
Bedaquiline resistance can be confirmed through whole genome sequencing which is a newer technology in tuberculosis diagnostics and is scarcely available. There is a need to scale up this technology across the country so as to get exact estimate of bedaquiline resistance and many genotypic studies can be done using the technique. This leaves us with a conclusion that although there is a significant development in TB diagnostics and treatment, new challenges are rapidly coming up in a high burden country like ours and a lot needs to be done for TB elimination as these challenges pile up.

Dr. Gunjan Upadhyay Professor & Head, Department of TB and Chest Diseases



### Concordia '23





Concordia '23 – a 4-days medical integrated hand-on training workshops was organized by MBBS students of GMERS Medical College, Gandhinagar for MBBS students of various colleges of India on July 24-27, 2023 with the aim of learning about the clinical and research aspects in medical field.

### Concordia '23 – Stichcraft

Department of surgery had organized workshop entitled "Stichcraft" – Suturing Techniques for Undergraduate Students under the Concordia 23 event on July 24, 2023. This transformative event under the leadership of Dr. Hiren Parmar and Dr. Pratik Shah with guidance of Dr. Shobhana Gupta (the Dean) and Dr. Niyati Lakhani (Medical Superintendent), gathered aspiring young medical professionals from various institutions for an immersive experience in the art and science of suturing.



The workshop provided a unique platform for budding undergraduate students of various medical colleges across the state to refine their surgical skills under the guidance of seasoned professionals. Distinguished surgeons and educators shared their insights, strategies, and hands-on expertise in a supportive and dynamic environment. Through a combination of interactive lectures, live demonstrations, and extensive practical sessions, participants were equipped with essential techniques and principles of suturing.



The workshop was started with the session on anatomy of the skin which was taken by Dr. Sudarshan Gupta. Sessions on management of lacerated wound (by Dr. Pratik Shah) and suturing techniques (by Dr. Hiren Parmar) were taken subsequently. These sessions were

followed by live demonstration and hands on training to all registered participants on mannequins. Every faculty had conducted engaging sessions that covered a wide range of suturing techniques and management of lacerated wound. From basic interrupted sutures to advanced techniques like running subcuticular sutures, participants were exposed to a comprehensive array of skills.



Well-equipped simulation laboratory provided participants with the opportunity to practice suturing on lifelike models, replicating real surgical scenarios. Instructors offered personalized guidance and feedback, ensuring each participant's progress. Attendees had the chance to engage in meaningful discussions with mentors, forging valuable connections that extend beyond the workshop. This networking aspect added immense value to the overall experience.



A total of 190 undergraduate students of all the medical colleges across the Gujarat had participated in this workshop. Dr. Hiren Parmar was the course coordinator of this workshop while Dr. Bankim Modi was Gujarat Medical Council observer. GMC had given 3 credit hours for this workshop. The workshop received overwhelming praise from participants, who expressed their gratitude for the invaluable skills and knowledge gained.

### Concordia '23 – Electrovibe



As a part of Concordia '23, a workshop on understanding and interpreting normal and abnormal ECGs was held at GMERS Medical College and General Hospital, Gandhinagar, on July 25, 2023. Outlines of the workshop were: learning the basics of ECG interpretation; understanding cardiac common abnormalities; expert-led sessions and interactive discussions; and hands-on practice with ECG machines. Eminent professors—Dr. Dinkar Goswami, Dr. Shashi Mundhra, Dr. Varsha Shah, Dr. Dharmesh Dodiya, and Dr. Nikunj Kotecha—conducted lectures on various topics, starting from the basics of the physiology of the heart and the normal conduction system, followed by

explaining the reasons behind the waves of an ECG and how the normal ECG appears so that it becomes easier to understand the abnormalities in the ECG and their interpretations. Along with it, participants were also briefed about the placement of the leads and the reasons behind the particular positions. Amidst it, a guest lecture on valvular heart diseases was also conducted. Further, the participants were provided the opportunity to acquire hands-on experience with patients about lead placements and conducting ECGs, which outshined all sessions. Quizzes and games were also organized throughout the day to keep the participants engaged. Overall, the workshop remained a pretty good success!

## Concordia '23 – Respire: Give Breath to Life

Department of Pediatrics, GMERS Medical College and General Hospital, Gandhinagar, had organized a workshop entitled "Respire – Give Breath to Life" for neonatal resuscitation on July 26, 2023 for MBBS students of all phases, as part of Concordia '23 in the Auditorium.



Currently birth asphyxia (failure to initiate first breath at birth) is responsible for 23% neonatal deaths worldwide. Neonatal mortality can be greatly reduced by training all health care professionals attending delivery to do neonatal resuscitation in first golden minute of life. Primary objective of this workshop was to sensitize and train the medical undergraduates for neonatal resuscitation, as SDG 2030 aims to achieve the goal of reducing infant mortality rate to 20.



Eighty-five third year medical undergraduates had attended this workshop.

First, video link had been shared to all participants, which was followed by hands on training given to each participant on mannequin by master trainers. Students were divided in seven groups for hands on training on

mannequin. Clinical scenario had been given to each student on the table for practice, and his/her skills had been evaluated by post-test.





Feedback had been taken from all the participants at the end of workshop and participants reported this event to be a unique and worthwhile experience to develop required skill in controlled environment and useful for getting self-confidence to attend any delivery as a skilled birth attendant.

### Concordia '23 – Theorem

The workshop on "Research Methodology and Scientific Writing" for medical undergraduate students was conducted on July 27, 2023 as a part of Concordia-23 organized by third year medical undergraduates under the aegis of Institutional Ethics Committee, GMERS Medical College, Gandhinagar. The aim of the workshop is to impart essential skills and knowledge in research design, data collection, analysis, and scientific communication. This one-day workshop had awarded 3 credit hours from Gujarat medical Council (GMC).

Experts of sessions: Dr. Chinmay Shah, Dr. Darshan J Dave, Dr. Amit M Shah, Dr. Apexa B Shukla, Dr. Gunjan Upadhyay, Dr. Pranay Jadav.



The workshop commenced with an inaugural address emphasizing the importance of research in advancing medical knowledge and practice. Eminent researchers and faculty members shared their experiences and insights, inspiring participants to engage actively in research endeavours.



Sessions on research methodology covered generating research question, various study designs, including

observational and experimental methods. Interactive sessions enabled students to understand the strengths and limitations of each clinical study design. Practical sessions, in which hands-on training was given to participants, encouraged them to formulate research questions relevant to clinical practice, and taught data collection techniques.



Ethical considerations in research involving human subjects were discussed with relevant examples and guidelines for obtaining informed consent were discussed. Participants were also guided about the different components of research papers, including the background and study rationale, methodology, results, and discussion sections. A session on referencing and citation styles familiarized students with proper attribution of sources in scientific writing. Plagiarism awareness and ethical considerations in citing sources were also discussed.





The workshop received enthusiastic participation from medical undergraduate students, showcasing their eagerness to develop research skills. Feedback indicated that participants felt more confident in formulating research question, literature search and had gained valuable insights into scientific writing principles.

### Workshop on Post-Partum Hemorrhage

Post-Partum Hemorrhage (PPH) is one of the leading causes of maternal mortality in India. There are lots of interventions done by Government to reduce maternal mortality. In the same view AOGS organized Logycon 2023 conference from August 4-6, 2023. On the 4th August, PPH workshop was part of same conference. PPH is the night mare for any gynaecologist and such type of workshop will help our young gynaecologist to deal with day-to-day difficulties during LSCS. Looking at the scenario of rising trends of LSCS, this workshop has taught very basic and must know techniques to save the uterus as well as the mother. Office bearers of Logycon 2023 had requested our institute to host of same workshop. Dr. Bipin Nayak (HOD of Obstetrics & Gynaecology) had accepted same and all necessary permissions given by Dr. Shobhana Gupta (Dean) and Dr. Niyati Lakhani (Medical Superintendent).



Workshop was inaugurated by lightning the lamp at 2:00 pm on August 4, 2023.

There were 3 cases operated in workshop and telecasted live at AMA Ahmedabad where around 100 participants were present to see live surgeries.

Dr. Ajesh Desai operated 1st case in which he had demonstrated Internal Iliac Artery ligation by different routes.

Dr. Mahesh Gupta operated 2<sup>nd</sup> case in which he had demonstrated COMOC-MG technique to treat PPH. COMOC-MG is technique which was invented by same surgeon in which Compression of Uterus with Uterine artery Occlusion done by special suture in very easy manner. Further he had demonstrated Insthmo-cervical stitch for lower uterine segment bleeding.

Dr. Vijay Kansara had demonstrated evidence base LSCS in previous CS case. He had also demonstrated bladder dissection in pre-CS case.



Dr. Shobhana Gupta, who is also HOD of Anaesthesia, was remain present throughout the workshop and her team managed all cases efficiently.

Dr. Geet Gunjan Khaitan (HOD of Paediatric) was also present, and her team managed all neonates very efficiently.



Dr. Bipin Nayak (HOD of Obstetrics & Gynaecology), Dr. Vijay Kansara, Dr. Rohit Jain, Dr. Komal Modi, Dr. Rakesh Patel, Dr. Chirag Banker and all residents of Department of Obstetrics & Gynaecology work hard to make grand success of this workshop.

All workshop participants leaned this technique to treat PPH and they can adopt and implement this technique very easily at their own centre.

Department of Obstetrics & Gynaecology of our institute will be always ready to conduct such type of workshops and conferences for qualitative improvement of our own residents as well as young gynaecologist.

# World Breast Feeding Week and ORS Week



















The Department of Pediatrics of GMERS Medical College and General Hospital, Gandhinagar, celebrated "World Breast Feeding Week" and "ORS Week" between August 1 and 7, 2023, under the guidance of Dean madam and Medical Superintendent madam. Various activities organized were: post-delivery ward

health talk; quiz competition for MBBS students; rangoli and poster competition; and role play on the importance of breastfeeding and ORS. MBBS and nursing students participated in the events with great enthusiasm. Prizes and certificates were given to the winners and participants.

### Aetherius '23: A Symphony of Culture and Talent

We are thrilled to relive the mesmerizing moments of AETHERIUS '23, a grand cultural event hosted by the Rivieria Cultural Forum on the August 12-14, 2023 in the illustrious backdrop of the GMERS Medical College Auditorium, Gandhinagar.

#### Inauguration – A Cultural Prelude:

The journey commenced on August 12, 2023 with a vibrant inauguration ceremony graced by esteemed Chief Guests: Dr. Yogeshanand Goswami (CEO, Gujarat Medical Education and Research Society (GMERS), Gandhinagar), Dr. Shobhana Gupta (Dean), and Dr. Niyati Lakhani (Medical Superintendent). Their presence added prestige to our event. The Cultural Advisors, Dr. Meeta Parikh (HOD of Pathology), Dr. Dinkar Goswami (HOD of General Medicine), Dr. Darshan J. Dave (HOD of Pharmacology), Dr. Kirankumar Chauhan (HOD of Biochemistry), and Dr. Dr. Gaurishanker Shrimali (HOD of Microbiology), provided invaluable guidance.

#### A Soulful Prayer and Welcome Dance:

The event began with a heartfelt prayer, setting the tone for unity and harmony. A captivating welcome dance performance left the audience spellbound, creating a sense of inclusivity and warmth.

#### **Student Felicitation Ceremony:**

Recognizing excellence, we felicitated our exceptional students, celebrating their dedication and hard work, encouraging their holistic development.

#### Dr. Yogeshanand Goswami's Melodious Karaoke:

Dr. Yogeshanand Goswami (CEO, Gujarat Medical Education and Research Society (GMERS), Gandhinagar), in a magical moment, graced the stage

with a melodious karaoke performance that left everyone in awe.

#### Dr. Shailesh Jhaveri's Enchanting Flute Performance:

The ceremony was further elevated by the enchanting flute performance by Dr. Shailesh Jhaveri (HOD of Forensic Medicine and Toxicology), which filled the auditorium with soul-stirring melodies.

The festivities continued for three days with various competitions, exhibitions, and performances showcasing the diverse talents of our students and faculty members. There were a number of splendid dance performances which took the energy to another level. Some spoke out their hearts in the "Alfaaz" event while the fashion shows had different themes and amazing costumes. Art was everywhere, be it in sketching, mehendi or rangoli competitions. We witnessed some budding chefs and people participated enthusiastically in games like treasure hunt, quiz, dumb charades and antakshari.

The icing on the cake was the DJ Night on the last day where everyone enjoyed dancing and also had food stalls to keep the energy going.

We extend our heartfelt gratitude to everyone who contributed to the success of Aetherius '23. It wouldn't have been possible without your support, enthusiasm, and participation. Your dedication to nurturing talent and promoting culture within our community is truly commendable.

On the whole, "Aetherius" was an event of talent, opportunity and togetherness that enchanted everyone and filled their hearts with joy.











August 12 |13 | 14

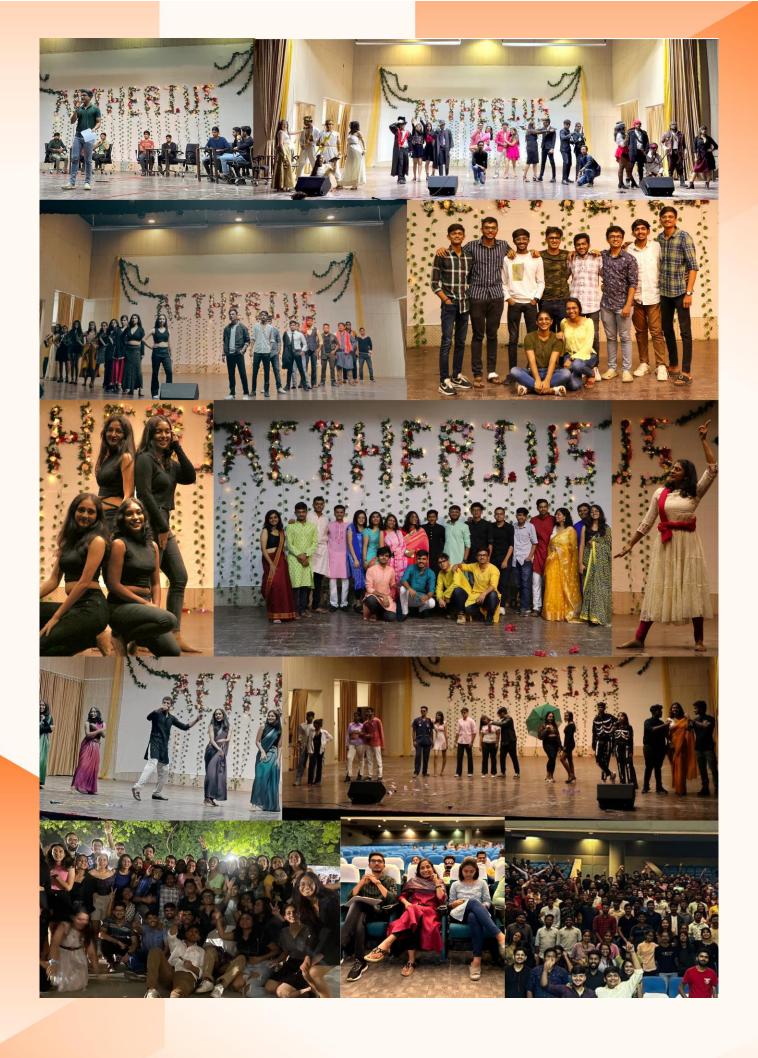














## Celebration of 77<sup>th</sup> Independence Day

On the occasion of the 77<sup>th</sup> Independence Day of our country, a flag hoisting ceremony was organized at the campus of GMERS Medical College and General Hospital, Gandhinagar, in the presence of the Medical Superintendent, Dr. Niyati Lakhani. On this occasion, all the staffs of the hospital and medical college and the relatives of the patients present in the hospital for the celebration of the event.



On this occasion, a competition was held to prepare slogans according to Independence Day. In this, the nursing and other staff of the hospital prepared different types of slogans for Independence Day. The winners were reward by Dr. Niyati Lakhani (Medical Superintendent) and Dr. Sudha Sharma (RMO).





Dr. Paragi Gandhi made all the attendees to do yoga and explained the benefits of yoga. Dr. Niyati Lakhani in her speech gave importance on five "U (P)" in life: pani (water); power (electricity); paper; plantation; and petrol.



And finally, the Independence Day celebration concluded with tea and snacks.

### Celebration of 'Meri Maati Mera Desh'







# મેરી માટી મેરા દેશ



# MERI MAATI MERA DESH MICLI KO Naman, Veeron Ka Vandan 6 Meri Moati Mero Desh compoign hos been lourched to honour our courageous men women. Under this, mony programs one being organised across the country in memory of

Meri Moati Mero Desh campaign has been launched to honour our courageous men and women. Under this, many programs are being organised across the country in memory of our immortal bravehearts. 99 Narendra Modi Prime Minister



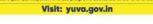
Every Panchayat to create 'Amrit Vatika'

Establishment of 'Shilaphalakham' in schools across India

- 15™ AUGUST 2023

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sure your participation in these programs dedicated to our bravehea









# Celebration of National Eye Donation Fortnight 2023

Eye donation is a noble cause that can transform lives. This program aimed to create awareness about the importance of eye donation, encourage people to pledge their eyes, and facilitate the process of eye donation.

National Eye Donation Fortnight is held every year from August 25 to September 8. To encourage as many as possible and to drive forward the noble cause, the National Eye Donation Fortnight was celebrated in all fervor at GMERS Medical College Gandhinagar. We would like to apprise you of some of the activities carried out by the Department of Ophthalmology, GMERS Medical College, Gandhinagar.

#### Inauguration and Lamp Lighting on August 25, 2023:

Time: 10:00 AM

Venue: OPD Registration area

The Eye Donation Awareness Program kicked off with a grand inauguration ceremony. Distinguished guests including Respected Superintendent Madam, entire faculty members of Department of Ophthalmology and other faculties, and students gathered for the traditional lamp lighting to symbolize the enlightenment brought by eye donation. The event featured inspiring speeches, highlighting the importance of eye donation.





Poster Making Competition on September 4, 2023:

Time: 3:00 PM

Venue: Department of Ophthalmology

A poster making competition was held to engage the creative talents of our students and staff. Participants created eye-catching posters that convey the message of eye donation. After several hours of focused effort, the completed posters were submitted for judging. This phase was marked by anticipation and excitement. The true reward lay in knowing that each poster contributed to the collective effort to raise awareness about eye donation. The winning entries were displayed prominently throughout the college campus to raise awareness.







#### **Eye Donation Awar**eness Rally on September 8, 2023:

Time: 4:30 PM

Venue: College Grounds

The program culminated with an eye donation awareness rally. Led by our esteemed Dean, the rally marched through the college campus and nearby areas, spreading the message of eye donation to the community. Students, faculty, and local residents participated whole heartedly in this impactful event.







#### Additional Activities Throughout the Fortnight:

- *Talks and Seminars:* Renowned ophthalmologists and eye donation experts conducted informative sessions, educating students and the public about the process and benefits of eye donation.
- *Donor Pledge Drive*: Special registration was available for those who wished to pledge their eyes and make a difference in someone's life.
- Social Media Campaign: Utilizing social media platforms to share real stories, facts, and updates about the ongoing activities.



### Homeostasis-2023 Biochemistry Quiz Winner



In a thrilling display of knowledge and teamwork, a team of the First MBBS Students of GMERS Medical College, Gandhinagar, clinched the 4th prize at the esteemed 'Homeostasis-2023' – A Biochemistry Quiz Competition. This state-level inter-college event, held at GCS Medical College, Hospital & Research Centre, Ahmedabad, on August 25, 2023, witnessed the participation of 42 teams from various medical colleges. Homeostasis-2023 was not just any quiz competition; it was a celebration of the intricate world of biochemistry. It brought together the brightest minds from across the state, providing a platform for students to showcase their proficiency in this vital medical discipline.

Our team of Students, under the expert guidance of Dr. Kirankumar Chauhan, the Head of the Department of Biochemistry, and the entire Biochemistry department, embraced the challenge with fervor. They displayed

their profound knowledge of biochemistry, responding to questions that tested their theoretical understanding and practical application of the subject.

Their hard work and dedication paid off as they secured the  $4^{\text{th}}$  prize. This achievement not only reflects the exceptional talent within our institution but also the quality of education and guidance provided at GMERS Medical College, Gandhinagar.

As we celebrate this remarkable achievement, we look forward to witnessing more successes from our students. Their dedication and commitment to their studies serve as an inspiration to us all. We are confident that they will continue to shine in their academic pursuits and contribute significantly to the field of medicine.

## Welcoming the Future Healers: White Coat Ceremony 2023

In a heartwarming tradition that marks the beginning of an exciting journey, GMERS Medical College, Gandhinagar, hosted the 'White Coat Ceremony' on September 11, 2023. This special event welcomed the new batch of First MBBS students for the academic year 2023-24 and set the stage for their transformative medical education.

The White Coat Ceremony is a time-honored ritual that symbolizes the transition from aspiring medical students to compassionate healers. It is a momentous occasion that inspires hope, responsibility, and dedication. The ceremony was graced by the presence of two distinguished dignitaries: Dr. Shobhana Gupta (Dean), and Dr. Niyati Lakhani (Medical Superintendent). Their wisdom and leadership set a powerful tone for the event.

The ceremony commenced with a captivating prayer dance performed by our talented students, Anmol and Dhanvi. Their graceful performance resonated with the spirit of unity and hope that defines our institution.





The lighting of the lamp by the dignitaries symbolized the dispelling of darkness and the acquisition of knowledge. It marked the beginning of a bright and illuminating journey for our new medical students.





One of the most significant moments of the ceremony was when the white coat was placed on the shoulders of each student. This act symbolizes the mantle of responsibility and professionalism that they will carry throughout their medical careers. Following this, the Hippocratic Oath, a solemn commitment to the ethical practice of medicine, was recited by the students, reinforcing their dedication to the highest standards of patient care.

To provide insights into the exciting journey ahead, students shared their foundation course experiences and reviews were taken from parents.

We welcome the First MBBS batch of 2023-24, we are excited to witness their growth, passion, and commitment as they embark on their path to becoming compassionate and skilled healthcare professionals.

### Seminar on 'Millets - Miracle Food for Future'

Millets were the basic staple food in the past throughout India. Year 2023 is declared as International Year of Millets by United Nations and is recognized globally.



They are also included in 'Poshan Mission Abhiyan' by Ministry of Women & Child Development, Govt. of India. To increase the awareness about nutritive values and health benefits of millets a seminar was organized by GMERS Medical College, Gandhinagar at Vrindavan Garden, College Campus on September 11, 2023.





Dr Umesh Vaishnav, Dr Bhaskar Thakkar and Dr Jignesh Harkhani were invited as expert speakers. Role of millets in healthy lifestyle & nutritional therapeutics was discussed at large during the seminar.









Nearly 100 participants had attended this scientific programme. The sessions were lively, engaging, educative and informative. Seminar was followed by delicious traditional lunch prepared from the millets with traditional technology at organic kitchen garden. Event was very well coordinated by Department of Physiology, GMERS Medical College, Gandhinagar.

# Inauguration of MRI Center

















### The Anesthesia Amusers



Felicitation of Respected Dr. Shobhana Gupta (Dean) madam, Dr. Bharti Rajani, Dr. Hina Gadani, all Senior and Junior residents, by 'Gujarat BJP Doctor Cell' and Mrs. Ritaben Patel (MLA - Gandhinagar North Assembly), for the training of BLS imparted to almost 3000 BJP workers, police force.





A 22-year-old female patient with Koch's spine was operated on for thoracic fixation cage by anterolateral thoracotomy. The special indication in this case was 'One Lung Ventilation' under General Anaesthesia with Isolation of the left lung by Double Lumen Endotracheal Tube (DLT). DLT special type of is endotracheal tube requiring expertise for insertion, the correct position, and intraoperative management. During the 4 hours of operative duration, the patient was successfully managed by the Anaesthetists, Dr. Hina Gadani, Dr. Richa Gupta, Dr. Dhara Upadhyay, and Dr. Priya Bhagora. SpO2, EtCO2, RR, TV, PEEP, PR, BP, UO, and analgesia were maintained throughout the procedure, and the patient was extubated uneventfully.

#### Publication of a Case Series:

Gadani HN, Jariwala ND, Kureshi MM, Shah VM, Thakkar PD. Anesthetic management of pediatric patients with congenital heart disease posted for cochlear implant: A case series. Anaesth Pain Intensive Care 2023;27(4):590–595; DOI: 10.35975/apic.v27i4.2272

# Indeed, at Community Level...





Awareness programme on vector borne diseases was conducted by interns of batch 2017 and 2018 at Govt. School of Sector 24, Gandhinagar on August 17, 2023. Students were given knowledge about transmission, treatment and prevention of diseases such as Dengue, Malaria, Chikungunya, etc. through various charts and posters under the guidance of Dr. Jignesh Chauhan (HOD of Community Medicine). Children were motivated to spread the awareness among community that "Good health and good sense are life's two greatest blessings"

'World Breastfeeding Day' was celebrated on August 07, 2023 at Urban Health Training Center (UHTC), Sector 24, Gandhinagar under the guidance of Dr. Jignesh Chauhan (HOD of Community Medicine). Importance of breastfeeding, immunization, and infant and young child feeding practices was provided to beneficiaries through interactive session and animated videos. It was very fulfilling experience for UHTC staff.





# Celebration of 3<sup>rd</sup> National Pharmacovigilance Week

ADR Monitoring Centre, Department of Pharmacology celebrated 3rd National Pharmacovigilance Week from 2023 under September 17-23, the aegis Pharmacovigilance Programme of India (PvPI), Indian Pharmacopoeia Commission (IPC), Ghaziabad. The theme for this year is "Boosting Public Confidence in Pharmacovigilance". Various activities, for public increasing reporting from patients, sensitization of healthcare professionals, were planned under the guidance of Dr. Darshan J. Dave (AMC Co-Ordinator, HOD of Pharmacology). All necessary permissions & support were given by Dr. Shobhana Gupta madam (Dean) and Dr. Niyati Lakhani madam (Medical Superintendent).



Patient awareness programme regarding adverse effects of medicines, reporting of ADRs was organized daily in the OPD area.



Suitable tools like-banner, poster, slogans, OPD screen and one to one interaction as well-were used to deliver information to the patients and relatives.

On September 20, a poster competition on topic "Boosting Public Confidence in Pharmacovigilance" was organized for MBBS students. Students from all years enthusiastically participated in the competition. A total of 10 teams comprising of around 30 students prepared posters related to the topic. Dr. Shobhana Gupta and Dr. Ankur Zalawadia had graced the event by showing their esteemed presence as judges.



A CME was organized on September 21, for healthcare professionals working in GMERS medical College and General Hospital, Gandhinagar. Welcome address and information on pharmacovigilance activities conducted by AMC-Gandhinagar was given by Dr. Shivani Trivedi - PV Associate. This was followed by interactive talk of Dr. Jigar Modi (Deputy Co-Ordinator of AMC) on Importance of pharmacovigilance & guidelines for ADR reporting.



Challenges in patient involvement in ADR reporting & measures to overcome them were discussed in detail by Dr Darshan J Dave.



Interns and resident doctors also took an oath for reporting an ADR without fail.



A presentation on "Sensitization cum Reporting of ADR (ADR reporting form -Vernacular language)" was done by Dr Kamalesh Bhatt and Dr Riddhi Bhatt.

On September 22, awareness program of proper drug usage & their adverse drug effects in general public was held at community level. Distribution of information sheets having information in vernacular language regarding adverse events, where and how to report, whom to contact and toll-free number was done.



Patients admitted in the different wards and their relatives were also made aware of the different adverse events of the drugs and ways of reporting of ADRs. They were provided with information sheets in vernacular language.



Dr Hardik Prajapati, Dr Kamalesh Bhatt, Dr Riddhi Bhatt, Dr Disha Mehta & Dr Jinal Parikh were actively involved in patient awareness in OPD as well as admitted patients.



#### દવાની આડઅસર અને તેની નોંધણી અંગેની માહિતી



#### દવાની "આડઅસર" શું છે?

દવા સામાન્ય રીતે બિમારીના ઇલાજ માટે વપરાય છે. દવાની આવી ઈચ્છનીય અસર ઉપરાંત અનિચ્છનીય અસર પણ થતી હોય છે, જેને દવાની આડઅસર કહેવાય છે.

#### દવાની આડઅસર કેવી હોઇ શકે?

દવા લીધા પછી ખંજવાળ આવવી, ચામડી પર લાલ, કાળા કે સકેદ ડાધ પડવા, દાણા નીકળવા, બળતરા થવી, પેટમાં બળતરા કે દુખાવો, શરીર પર સોજા યઢવા, યક્કર આવવાં વગેરે જેવી આડઅસર થઈ શકે છે.

શું તમે જાણો છો કે દવાની આડઅસરની નોંધણી દર્દી અને દર્દીના સગા પણ કરી શકે છે ?!!

#### દવાની આડઅસરની નોંધણી ક્યાં કરવી ?

કોઈ પણ આડઅસરની નોંધણી સ્વાસ્થ્ય અને પરિવાર કલ્યાણ મંત્રાલય, ભારત સરકાર દ્વારા સ્થાપિત નેશનલ કો-ઓર્ડિનેશન સેન્ટર, ફાર્માકોવિજિલન્સ પ્રોગ્રામ ઓફ ઇન્ડિયા, ગાઝિયાબાદ અથવા નજીકના એ. ડી. આર. મોનીટરીંગ સેન્ટરમાં નીચે જણાવેલા માધ્યમથી કરી શકાય છે.



ટોલ ફ્રી નંબર પર સંપર્ક કરીને: 1600-160-3058 (સોમવારથી શુક્રવાર એન્ડ્રોઈડ મોબાઈલ

ADR PVPI narmacovigilance

નજીકના એ. ડી.આર. મોનીટરીંગ સેન્ટર માં



એ. ડી. આર. મોનીટરીંગ સેન્ટર, ફાર્માકોલોજી વિભાગ, જી.એમ.ઈ.આર.એસ. મેડિકલ કોલેજ, ગાંધીનગર

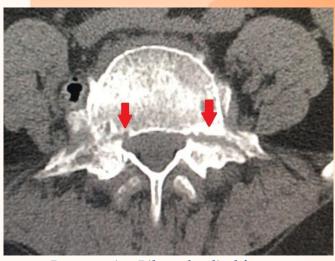
Program of India

# Bilateral Pedical Fracture – A Case Report

A 45-year-old male patient with lumbar canal stenosis and traumatic lumbar instability at L4-L5 level with neurological deficiency due to bilateral L5 pedical fracture and Grade-1 L3-L4 listhesis, Grade-2 L4-L5 listhesis, and Grade-1 L5-S1 listhesis with neurological involvement without any bowel or bladder involvement.



Pre-operative X-ray



Pre-operative: Bilateral pedical fracture

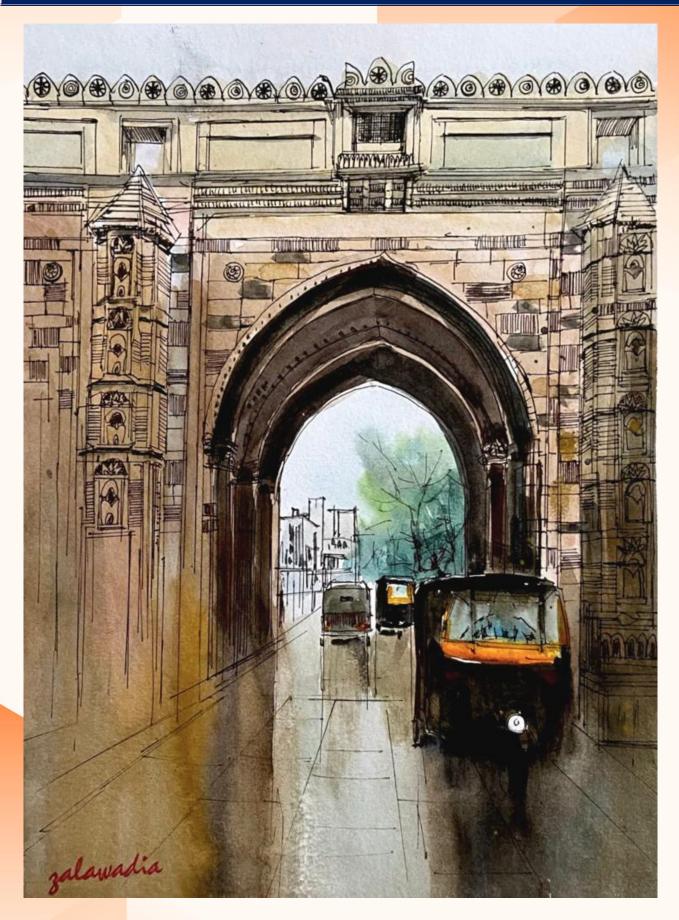
Patient underwent operative procedure for posterolateral fusion with bone graft. Decompresion was done with L4, L5 and S1 laminectomy and discectomy at L3-L4, L4-L5 and L5-S1 level.



Post-operative X-ray

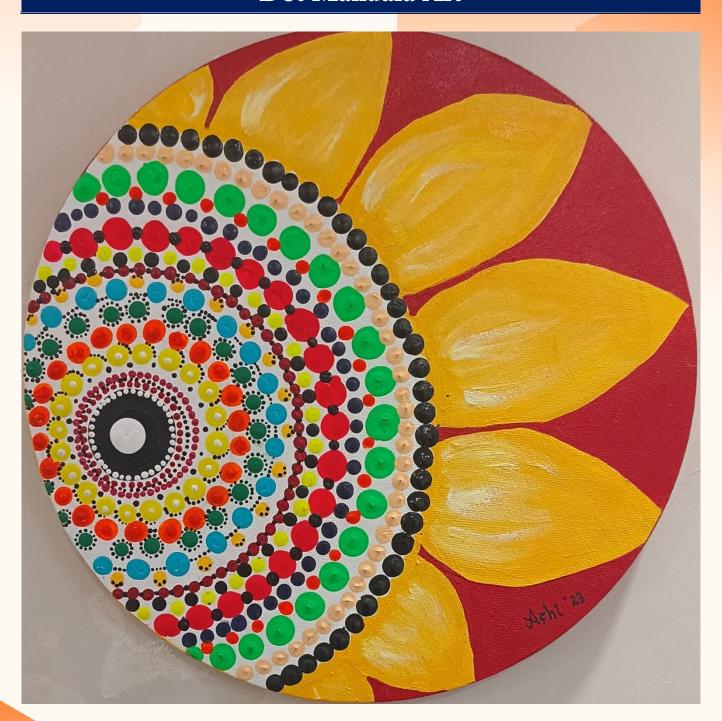
Post-operatively, patient's neurology status came to as pre-operatively with relief of radicular pain on the next day of the surgery. Physiotherapy and mobilization done with Lumbar corset belt and walker after 1 week.

# Urban Sketch



Dr. Ankur Zalawadia, Professor & Head, Department of Anatomy

# Dot Mandala Art



Dr. Ashita Vyas, Assistant Professor, Department of Biochemistry

# Kitchen Corner: Spinach Banana Oats Smoothie

#### **Preparation Time:**

3 minutes

#### **Ingredients:**

This is a super simple smoothie with only 5 ingredients:

- Banana 1: Ripe bananas are best for a smoothie as they have a natural sweetness and make it extra creamy. You can use a fresh banana, or a frozen banana can work wonders to keep that smoothie coooool.
- Spinach: Handful of fresh spinach leaves. (Preferably baby spinach but the grown-up kind is fine too!).
- Peanut butter 1 teaspoon: High in protein, peanut butter is one of the ingredients in making a smoothie that's both tasty and filling.
- Liquid 250 ml: Unsweetened soy milk to make a vegan protein smoothie but you could use another non-dairy milk or dairy milk of your choice, or just plain water if you want to keep the calories down. Obviously, milk over water is preferable to keep the creaminess going and create the perfect smoothie (though water keeps it a low-calorie smoothie recipe).
- Oats 2 teaspoons

#### **Health Benefits:**

Bananas, spinach, and oats contain a lot of dietary fibers. Fiber-rich foods help you stop snacking by keeping you satisfied for longer time.

You're also going to get a load of iron and potassium. Potassium helps fight against increased blood pressure and stops muscle weakness.

Iron, a key nutrient, is used by the body to create myoglobin which provides oxygen to the muscles – essential if you're working.

#### Recipe:

Take a blender (Preferably a high-speed one). Put together, throw in a banana, a handful of spinach, natural peanut butter, Oats, your liquid of choice. Close and blend.



Serve and enjoy!!!!

Dr. Bela Padhiar Professor & Head Department of Skin & VD



We salute our dedicated doctors for their unwavering commitment to heart health. Your care saves lives.



