

Issue 3
May 2024

kakatiya chronicles.

beauty in
medicine.

"BRINGING PERCEPTION
AND PERSPECTIVE TO
REALITY"



RESEARCH
CASES
CREATIVITY

www.kmcwgl.com

SNEAK PEEK

Forward: With due respect to all the branches of medicine, Sneak peak gives Quick Look of the beauty of few branches in Medicine.

An ocean of knowledge
with a task of pledge
There is a zeal of feel,
makes up a heal.
Physician's mighty
more than Almighty.

A suspicion soaps up
an eagles eye soaps up.
For the patients weak heart
there is a man with lion heart
Waiting for a Time, makes body to rhyme
The supreme detect, Surgeon more than
architect.

When it is light
life is flight
Creation makes a mark
with ever glowing spark
There is a Million dollar's baby smile
It's Obstetrics and Gynecologists mile

There is a divine protect
for budding smiles to detect
The wonder midas touch
makes it so much
For the life to score up
Paediatricians gear up.

Doctors microscopic vision, for the lesion
From the seed to flower
Radiologists evaluate
and Pathologists elate
The diagnosis dares out
and prognosis pays out.

- © Dr R Sridhar,
Assistant Professor,
Department of Pathology,
KMC Warangal



PRINCIPAL'S ADDRESS

Dear Readers,

I extend a warm welcome to all the batches that recently joined Kakatiya Medical College, an esteemed institution standing as a beacon of academic excellence, renowned for its pioneering research, and unwavering commitment to compassionate healthcare.

"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all." Just as Sir William Osler wisely noted, getting hands-on with patients is crucial for our budding doctors. Spend ample time with them, as it's through these interactions that you'll truly learn the art of diagnosis-observing, experiencing, and understanding, rather than just relying on lab results.

Finding satisfaction in your work is crucial. Personally, I preferred pediatrics over surgery. However, in my postgraduate exam, I ranked 10th in the state, with pediatrics closing at 8th place. This unexpected turn of events led me to where I am today. For someone who never paid attention to surgeries in my undergraduate and intern days, navigating through my PG proved to be a challenging yet enriching experience, filled with plenty of opportunities for personal and professional growth.

I learnt much along the way, yet one lesson will forever remain close to my heart; every surgery is a significant event in a patient's life. Always take a moment to consider your next move. In surgery, there's no such thing as a small or big procedure-they all matter equally. Every surgery you witness or perform adds to your skills. While theory guides you on what to do, time and experience will teach you what not to do.

Allow me to share an anecdote:

During my tenure as a postgraduate, we encountered a case of Filariasis that mandated amputation of the leg. Despite our best efforts, post-surgery, the leg continued to ooze blood and serous fluid for hours, leading us to fear for the patient's survival. Miraculously, against all odds, the patient managed to pull through. This exemplifies that in the field of surgery, a surgeon might possess the requisite knowledge and skills, yet luck also plays a significant role.

Throughout my journey of working as a general surgeon, I've been inspired in many aspects by my teachers and mentors. Without the steadfast support of both my mentors and my parents, I cannot envision holding the position that I do today. Always honor your teachers and stay connected with them. Each Teacher's Day, I make it a point to reach out to my mentors, Dr. Pratap, Dr. Chandrashekhar, and Dr. Masood, and together, we would joyfully reflect on the fond memories of our past.

Reflecting on my student days, I recall the high standard of education we were fortunate to receive. Textbooks were our trusted companions, and teachers were always there to steer us back on track if we ever lost our way. However, it's disheartening to see that the quality of teaching seems to be declining nowadays. I strongly encourage students to maintain a balance between theoretical study and practical application. Dedicate time, use active learning, seek clarity, and utilize diverse resources for success in both learning and practice.

Remember, it's not just about achieving personal success; it's about serving humanity with integrity and compassion. When we remain committed to this purpose, professional fulfillment and financial stability will naturally follow. Each experience in your self-improvement journey shapes you into a better version of yourself.

I would like to congratulate the editorial team of Kakatiya Chronicles for their dedication in maintaining the continuity of this periodical.

Best wishes to all.

Dr. D. Mohandas,
MS, General Surgery
Principal, KMC



TO INSPIRE AND GET INSPIRED



It's exciting to hear that our most loved student journal, Kakatiya Chronicles, is seeing a new issue. Student journal gives you a platform to get ideas, germinate them, and get inspired by your seniors/faculty and to venture out and shoot for the stars. Have you ever sat down to try and write something for it to be read by others? If you did not yet, try it! I can promise you that the adventure of that process will give you goosebumps. I am facing that as I write to you this piece.

As I recollect my college days in KMC, one thing strikes out in particular- the comradery of friends and most importantly how we get shaped by the people we get inspired from. I clearly remember some important lectures from an orthopedics teacher, diagnostic acumen of a faculty physician, and the superb surgical skills I noticed from a surgeon while operating in the OR. I have met them multiple times in my life after the college days but unfortunately, could not tell them since I have met only during some community work that I have been in with them together. Hope in the near future I could. Having a mentor in your college days is good. But if you have none, the next best thing to have been is to have someone that you get inspired from. In my view that works wonders. Find your Hero's!

I am told that the student journal editors are getting a fantastic response for publications. If you ever dream to become a great researcher or a successful scientist, having writing skills is of paramount importance. The journey of a thousand miles starts with a single step. Use this journal to harness your writing skills for bigger things in future. There is nothing "big or small", for you to participate in this. "Learning is never done without error and defeat" – Vladimir Lenin. So, pick up your pen and start writing on anything you are good in or have an interest in. You could start inspiring your juniors. And that is the most ultimate achievement you could think of in your college days!

Coming to some activities, we, as US alumni are working on, the Biostatistics part time faculty Dr Mallikarjun Reddy continues to be available for students/PGs to work for your research projects (for methodology/statistical analysis) apart from delivering lectures monthly. Please avail this opportunity. This year, we are thinking of conducting Research Day again but mostly in the month of October/November. Since the first edition was successful, it's imperative on us to make the second one a bigger and better one. Our Research Day committee is discussing the agenda for the same. We plan to introduce an opportunity where all KMC students can display their research in the poster session and pertinent feedback to improve, will be provided on the spot, apart from being considered for the awards.

Since the last journal issue, we have had the following talks given by US alumni who continue to show interest in imparting training upon our students. Hope you continue to utilize this opportunity.

1. Drug Allergy by Dr Rani Kommareddy Vatti
2. Non-Alcoholic Fatty Liver Disease: Things you must know & How to Start a Research Project and Build a Research Career by Dr Naga Prasad Chalasani
3. Current Trends in Pain Management by Dr Srinivas Nalamachu

Till the next issue, stay cool in the summer!

With warm regards,
Sujeeth R. Punnam, MD, FACC
KMC Batch of 1988
Interventional Cardiology, Stockton, CA, USA
Convener, Kakatiya Research Day/ Academic Activities
Co-Chair, NRI Alumni Educational Center

FROM THE NRI ALUMNI DESK

#REFLECTIONS

SPIRITUALITY & I

What is spirituality and why do I need it in my life?



"Spiritual relationship is far more precious than physical. Physical relationship divorced from spiritual is body without soul."

-Mahatma Gandhi

We "live" by constantly interacting with our environment i.e., people & the rest of the world around us. We get wiser by learning from our experiences, mostly personal or sometimes other's. Learning from reading or listening is basically someone else's perspective or experience. Because one lifetime isn't enough to know it "all", we take help from other's "torch of intellect" to enlighten our understanding.

Medical science is the science of the workings of our human body. It is constantly evolving and we depend on the learnings of many scientists to help us in our understanding. However, there are many who live a healthy life without any medical knowledge. And that's fine! But, we as the medical fraternity, are better equipped to cope having learnt of the inner science of the human body.

Spirituality is the "science of our consciousness" which has been passed on to us by many sages and seers of the past. There are no material laws like those that govern matter. There is no clear evidence like in medicine for us to reflect on and understand. Consciousness is an abstract idea. It cannot be quantified or identified in material terms though it is perceived and accepted by all. Without material evidence, our logical mind fails to fathom and hence, be interested in it.

Similarly, in life

Our body is the car that we sit in and drive around. Our movements are just superficial expressions of the engine of “knowing” hidden under the vast ocean of our consciousnesses. Only when we dip into this realm beneath, will we become aware. Otherwise, like most, we too go about as “unsure drivers” of an excellent car.

Spirituality is the way to understand the essence of the deeper parts of our existence. As there is no material evidence, we have to depend on the religious scriptures passed on to us.

Each of us has an individual experience which cannot be expressed in physical terms. Hence, it is ill advised to compare notes on the spiritual plane!

When we learn about ourselves better, we go about our life with lesser breakdowns. Regular introspection helps us to maintain our car’s engine and allows us to run it smoothly. Our confidence improves as well and...

We live a much better and fulfilling life.

Dr Ramakrishna Vyakernam
1988 KMC Batch (Pioneer)
Intensivist & Anaesthetist
Wrexham Maelor hospital
UK

KAKATIYA

CHRONICLES

INTRODUCTION

Principal's address	A
To inspire and get inspired	B-C
NRI Alumni Desk - Spirituality	D-E

CASE CORNER

Beyond the Blood Brain Barrier	03
Power of Teamwork	04
A Bag Of Loops	04
Cervical Scrofula Mimicking ..	05
Complete Molar Pregnancy	05
Fetus in fetu	06
Cracking the Kawasaki code	06
The Elusive Mimicker..	07
Future Vision	07
Lithium and its effect	08

RESEARCH CORNER

AMR - Antimicrobial Resistance	10
Zika Virus Therapy	12
Beyond The Blockage	13
Breaking the Mold	14
Women's Health Gap	15
Oral Tolerance	16



MISCELLANEOUS

MED TRIVIA	17
Internship Diaries	20
One Among us	21
Intermedics news	23
Project Pads	25
STUDENT CORNER	26
Serial Killers	31
Developments in KMC	35

CASE CORNER

MEDICAL THEORIES & CLINICAL REALITIES!

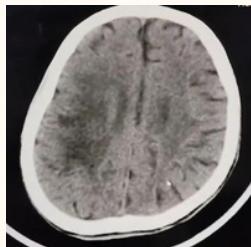


Figure 1

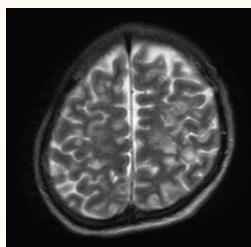


Figure 2

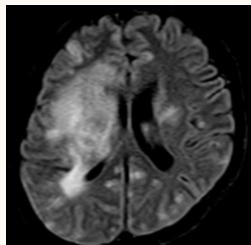


Figure 3

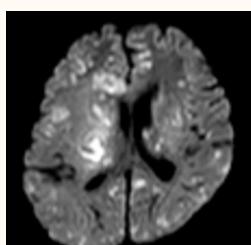


Figure 4

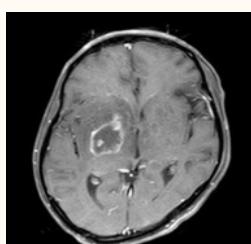


Figure 5

01 BEYOND THE BRAIN BARRIER—NAVIGATING CEREBRAL TOXOPLASMOSIS

A 42 year old male, who was a daily wage worker, initially presented with fever and weight loss at a peripheral health centre.

On examination, he was conscious but disoriented to time, place and person. Notably there was no H/O seizures, head trauma, vomitings, headache, and other significant comorbidities. Amidst the search for answers to his symptoms, surprisingly emerged—a viral marker that spelled out positive for HIV, warranting referral to MGM for comprehensive evaluation. However, the patient delayed and came to MGM after 10 days. Upon eventual presentation to the EMD, there was worsening of symptoms characterized by high-grade fever and profound alteration in sensorium with GCS of E1V1M1, indicative of critical neurological compromise.

CT BRAIN was done which showed vasogenic edema in right frontoparietal region, right CGR, right side of brainstem and cerebellum.[fig.1]

Further MRI BRAIN showed, multiple well defined T2, FLAIR hyperintense lesions of variable sizes throughout the brain, including cortical grey matter subcortical white matter of bilateral cerebral hemispheres, basal ganglia, and cerebellum [fig.2,fig.3] with few lesions showing diffusion restriction with perilesional T2 flair hyperintensity predominantly in right CGR region [fig.4].

On post-contrast variable enhancement, a faint ring-like enhancement was seen in few lesions, with the largest measuring 27*25mm in right CGR[fig.5].

Considering the immunocompromised history of patient and rapid deterioration, the diagnosis of cerebral toxoplasmosis was made. Unfortunately, the patient expired the next day.

Cerebral toxoplasmosis is an opportunistic infection caused by intracellular protozoan parasite *Toxoplasma gondii*, it typically causes disease in immunocompromised individuals. There have been limited reports on the seroprevalence of toxoplasmosis among immunocompromised individuals, particularly with HIV. It typically occurs when CD4 count drops below 100.

- Charitha.S

IInd year Postgraduate, Department of Radiology

02 POWER OF TEAMWORK.. EARLY DIAGNOSIS..EARLY TREATMENT.



Erythroderma is a severe and potentially life-threatening dermatitis an intense and widespread erythema typically involving greater than 90% of the body surface area, with a variable degree of exfoliative skin scaling. The common triggers are underlying dermatitis, atopic dermatitis, and contact dermatitis . ATT induced Drug reaction is another important cause of erythroderma with an incidence of <0.001%, making TB treatment challenging.

Case Report:

A forty-year-old male who had a one month history of cough, loss of weight, and fever was diagnosed with pulmonary TB after sputum CBNAAT and was started on DOTS from a peripheral hospital. After 12 weeks of treatment in CP phase, he came to our hospital with generalised hyperpigmented scaly plaques over body, palms, and soles.

No lymphadenopathy was observed. There was no history of any other drug intake or history of jaundice, chest pain, palpitation, and dyspnea on exertion. No preexisting dermatosis or prior exposure to chemical precipitants of dermatitis. Negative Family history. Physical examination revealed edema feet. Laboratory investigations were within normal limits. HIV-ELISA was nonreactive. Skin biopsy report showed inflammatory infiltrates in upper dermis and pigment incontinence suggestive of erythroderma. ATT was stopped immediately, treated with steroids, topical emollients, antihistamines. After 1 week of rechallenging, ATT was sequentially added starting from isoniazid, rifampicin, ethambutol. He developed reactions to isoniazid, ethambutol started from lowest dose but tolerated rifampicin. He was kept on oral Levofloxacin, Rifampicin, and Ethionamide.



Discussion:

Erythroderma secondary to ATT can be due to genetic predisposition or due to HIV infection, polypharmacy, advanced age, autoimmune disease, or renal or liver impairment. This can be fatal; hence early identification and management are to be done.

Conclusion

Erythroderma secondary to ATT can be fatal; hence, condition should be identified earlier. Symptomatic management with ATT rechallenging should be done.

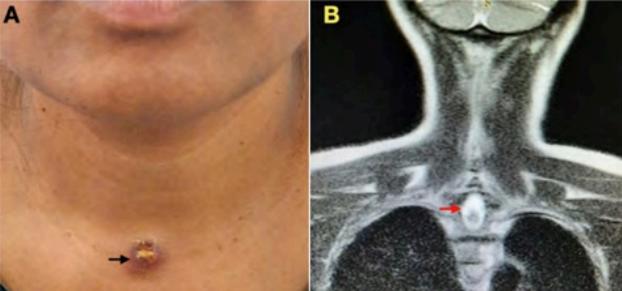
-Dr.Akhila Jose
IIInd Year Postgraduate, Department of Pulmonary Medicine

03 A BAG OF LOOPS

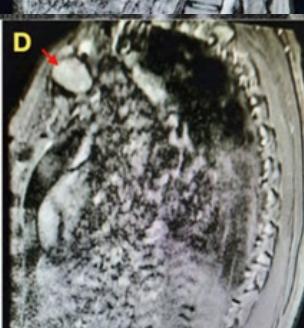


Omphalocele is an embryological occurrence with an incidence of 3 in 10,000 births. The first-year students were fortunate to witness this specimen in their dissection hall. The 16 to 20 weeks old aborted fetus arrived from MGM hospital, Warangal, presenting with a sac-like protrusion of abdominal contents, notably intestines on palpation. In the 6th week of embryological development, the midgut herniates through the umbilical ring and rotates while re-entering the abdominal cavity. Omphalocele or exomphalos results when this phase fails, causing the characteristic sac-like protrusion of the abdominal contents through the midline. The condition can be diagnosed by AFP screening, amniocentesis, or ultrasound. The cause could be due to faulty myogenesis of abdominal muscles, environmental hazards, or associated with certain genetic or cardiovascular abnormalities.

In some cases, small omphaloceles are managed by following through with surgical removal. If the fetus is delivered, it should be monitored with the following precautions after birth: nasogastric tube, endotracheal intubation, moist saline gauze, and plastic bowel bag. Despite the rare occurrence and precarious chances of survival, there are multiple successful "omphalocele-babies", living proofs of the ever-advancing medical field.



04 CERVICAL SCROFULA MIMICKING THYROID MALIGNANCY



A RARE PRESENTATION WITH PRETRACHEAL LYMPH NODE INVOLVEMENT IN AN ADULT FEMALE

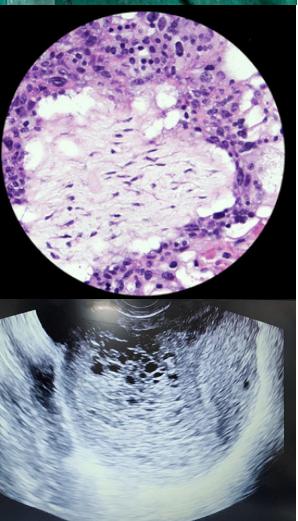
Tuberculosis remains the most prevalent disease in countries like India, contributing to 22.7% of the global burden. Lymph node involvement is the most common presentation of extrapulmonary disease, with the cervical group affected in 60-90% of cases, while the anterior group being involved the least, with less than 1% occurrence rate.

Here we have a case of a 33-yr-old female patient who came to our otolaryngology outpatient department with complaints of mild pain and swelling over the anterior aspect of her neck, that has been present for a month. She had a history of a previous rupture of the swelling. She had similar complaints of left sided neck swelling, two months back, which subsided with antibiotics. Clinical examination of the neck revealed an oval swelling, of size 1x2 cm, involving the anterior part of the neck. A discharging sinus was visualized over the swelling. Further investigations were indicative of thyroid malignancy, although the thyroid profile was found normal. A USG guided FNAC of the swelling was suggestive of benign follicular nodules- BETHESDA grade II. On MRI, T2 weighted STIR sequence revealed an ill-defined, peripherally enhancing hyper intense collection in the intramuscular and intermuscular planes adjacent to the insertion of the right sternal head. Cortical breach was noted in the anterior aspect of the manubrium and right transverse process of C7. Alerted signal density was noted in the vertebral bodies of D2 and D3. All these features were suggestive of infective spondylitis, most probably of Koch's etiology which was confirmed by Ziehl-Neelsen (ZN) staining of the discharge from the swelling. Furthermore, CBNAAT was positive for Mycobacterium Tuberculosis and sensitive for Rifampicin. The patient was diagnosed with a rare case of cervical scrofula (TB lymphadenitis) involving the pretracheal lymph node. Patient was started on anti-tuberculous treatment Category 1 for 6 months, as per RNTCP- Guidelines for TB control in India.

-Madhuri Moota, Senior Resident,
Department of ENT



05 UNRAVELLING THE ENIGMA: A COMPREHENSIVE CASE STUDY ON COMPLETE MOLAR PREGNANCY



Pregnancy is the most beautiful period of a woman's life. As a mother enters the gestation period, her thoughts and emotions revolve around the offspring that is growing inside her. Complete Molar Pregnancy is a rare and complex gestational disorder. It is characterised by the presence of hydropic-chorionic villi and the absence of fetal tissue. The following case study explores the clinical nuances of diagnosing and managing a complete molar pregnancy. A 38-year-old woman gravida 2, para 1, presented with abnormal uterine bleeding and protracted vomiting. During the first trimester, the bleeding was in dark brown to bright red in colour. Initial ultrasound revealed a uterine mass with characteristic snowstorm appearance, along with grape like cysts. Histopathological analysis of the evacuated tissue following dilation and curettage revealed hydropic-chorionic villi without any fetal tissue. Serial hCG monitoring established the absence of a normal decline. This led to a conclusive diagnosis of Complete Molar Pregnancy. Complete Molar Pregnancy requires a multidisciplinary approach for precise management. The treatment involved Dilation and Curettage for uterine evacuation which was followed by regular monitoring of hCG levels to detect potential persistent gestational trophoblastic disease. The patient received psychological support to cope with the emotional aspects of the diagnosis. Early recognition and vigilant hCG monitoring are vital for optimal outcomes. Comprehensive treatment, including D&C and psychological support, enhances care for affected individuals.

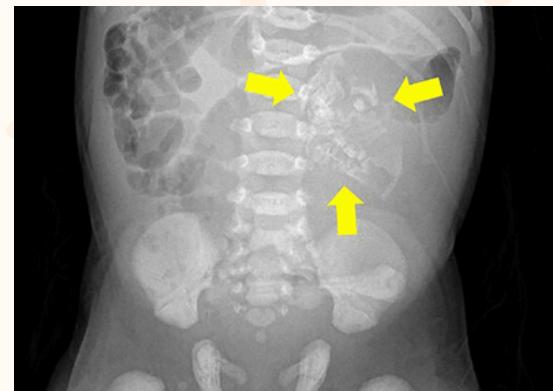
-G. Javali & V. Sai Sarath, IInd year MBBS



06 FETUS IN FETU

Fetus-in-fetu (FIF) is an extremely rare anomaly of monochorionic, diamniotic twins in which a malformed fetus resides in the body of its normal sibling during development. It occurs in about 1 in 500,000 live births. In most cases, the parasitic twin is anencephalic and usually contains a vertebral column and budding limbs. The upper limbs are less developed than lower limbs, and are usually located in the abdomen of the autositus.

A case of removal of a fetus in fetu in a 47-year-old man is reported. The patient had an upper abdominal mass since birth that had never caused any subjective symptoms. A preoperative computed tomographic scan was useful to confirm the diagnosis. The operative specimen consisted of a cystic mass about 20 cm in diameter, situated in the upper retroperitoneal space. The cyst was full of yellowish fluid and hairs. A bony structure, about 10 cm in diameter, contained a vertebral axis connected to the ribs and was adherent to the cystic wall. To our knowledge this is the first reported case of fetus in fetu described in an adult man. The tumor, present for 47 years, did not grow or cause any complications and did not show any sign of malignancy.



Although the most common site is the retroperitoneum, FIF have been reported at various sites right from the cranial cavity to the scrotal sac. Different organs can be seen in FIF, including vertebral column (91%), limbs (82.5%), central nervous system (55.8%), gastrointestinal tract (45%), vessels (40%), and genitourinary tract (26.5%). The recommended treatment for FIF is surgical excision. Because the final diagnosis of FIF is not made until pathological analysis, all parts of the mass should be removed to prevent malignant recurrence. Postoperative follow-up with screening for the tumor markers β -HCG and AFP is often used and is further supported on the basis of malignant recurrence of FIF. The detection of raised CEA levels generally indicates advanced malignant disease. Therefore, the raised CEA level in our first patient is of great concern. Whether this association of abnormal CEA level is a manifestation of the FIF or an incidental finding is unclear based on our case. Further studies are needed to establish the significant of this phenomenon.

In conclusions, the cases presented in our report meet all the accepted criteria of an abdominal FIF. The preoperative diagnosis of FIF is based on the observation of vertebral column or limbs in a mass on imaging modalities. The treatment of choice for FIF is complete resection. Future research efforts should be made to establish the true nature of FIF. Further studies to determine the possible association between FIF and highly differentiated teratoma are also warranted.

- B.Sidhardha Reddy& Vennela Alwala IIInd year MBBS



Kawasaki disease is an acute form of vasculitis typically observed in children, affecting medium arteries. Also known as Mucocutaneous Lymph Node Syndrome, it includes swelling in lymph nodes and mucous membranes inside the mouth, eyes, nose, and throat.

It usually resolves on its own. Children with Kawasaki disease have an elevated risk of developing autoimmune diseases in the long term.

07 CRACKING THE KAWASAKI CODE

A 6-year-old male child presented to the outpatient department (OPD) complaining of fever for the past 5 days, redness of the eyes, and rashes all over the body. Upon examination, he exhibited swollen lymph nodes, tenderness of palms, strawberry tongue, and bilateral conjunctivitis. Laboratory investigations including complete blood count (CBC) showed mild leukocytosis and increased ESR (erythrocyte sedimentation rate). Based on clinical examination and laboratory findings, Kawasaki disease was diagnosed. The diagnosis was challenging due to its rarity and unknown etiology.

-Varshini Gupta, IIInd year MBBS

08 THE ELUSIVE MIMICKER OF SKIN WOES



Sezary Syndrome stands out as a rare form of non-Hodgkin's T-cell lymphoma, posing a tough challenge in diagnosis. Its occurrence, at just one in a million patients, highlights its uncommonness. While its cause remains mysterious, suspected changes in chromosomes may be involved. The journey of diagnosis often starts innocently, with symptoms resembling common skin issues like eczema or fungal infections. This misleading appearance, combined with initial negative biopsies, prolongs the diagnostic process.

Mycosis fungoides, the early stage, further clouds the true nature of the disease, pretending to be a fungal infection due to its skin manifestations. A 56-year-old male patient Prem Singh, visited MGM derma OPD with ring-like rashes in his double-covered regions like underarm and groin. It gradually increased for several months. It was initially mistaken as eczema, psoriasis, or any other fungal infections and treatment was given accordingly. Several months later, the skin condition worsened, looking like flaky patches resembling a 3rd degree sunburn. Early skin biopsies were not revealing any atypical lymphocytes. Later, it was suspected as a cancer and sent to the oncology department. Involvement of other body systems, marked by swollen lymph nodes, enlarged liver, fever, and tiredness, painted a grim picture. Treatment, though difficult due to a weakened immune system, offers hope. Chemotherapy, though risky with chances of hospital-acquired infections like oral candidiasis, aims to prolong survival. With an expected stability of 4-5 years, the fight against Sezary Syndrome emphasizes the importance of being watchful and persistent when faced with uncertain diagnosis.

-K. Pavani, IIInd Year MBBS



Normal Eye

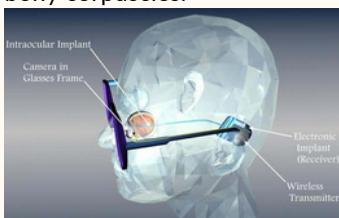


Affected Eye

09 FUTURE VISION

Imagine only being able to perceive the world around us in shades of black. A 22-year-old female patient was presented to opd complaining of long-standing defective night vision. There was difficulty in adaptation to low light conditions, i.e., delayed dark adaptation with mid peripheral vision loss.

On ocular examination, anterior segments of both eyes were normal, and the pupil was normal with normal reaction to light. On fundus examination, optic disc was pale, arteriolar vessels were attenuated, showing pencil-like thinning of vessels and bony corpuscles-like black pigmentation were seen. It was revealed that she was suffering from RETINITIS PIGMENTOSA, also called as primary pigmentary retinal dystrophy, a hereditary disorder predominantly affecting the photoreceptor cells (rods more than cones), affecting 1 in every 5000 individuals. Retinitis pigmentosa may occur as Sporadic or Inherited disorder, of which the autosomal dominant variety is common with less progression. This starts in childhood and keeps growing till adulthood. Mutation can trigger apoptosis of retinal pigment epithelial cells which detach and deposit into perivasculär areas, leaving melanin deposits resembling bony corpuscles.



A check on consanguineous marriage and proper genetic counselling for gene analysis is required.

With recent advancements like RETINAL PROSTHESIS-BIONIC EYE and OPTOGENETIC THERAPY, the probability of vision improvement is possible. While treatment options are still being evaluated, there are no scientifically proven cures as of today.

EVENTHOUGH FUTURE SEEMS TO BE BLEAK, THERE IS STILL PROMISING FUTURE FOR VISION RESTORATION.

-G. Adithi Reddy, IIInd year MBBS

KC 107

10 LITHIUM AND ITS EFFECTS ON BRAIN, BEHAVIOUR AND EMOTIONS



Bipolar affective disorder is a mood disorder that is characterized by episodes of mania or depression. Manic episodes are typically associated with excessive talkativeness, overfamiliarity, increased energy levels, elevated mood, excessive spending of money, grandiose ideas of self, hypersexuality, and similar other heightening of normal emotions. Psychosis is lack of reality-testing and characterized by a vast array of phenomenology ranging from delusions, hallucinations to disorganization symptoms. It is amazing and wonderful how Lithium, the 3rd element in the periodic table, can so efficaciously treat and prevent such a debilitating illness. Here we present a case of Bipolar Affective Disorder, current episode of Mania with Psychosis. A 20-year-old unmarried female hailing from middle-class socioeconomic status, with an urban background and currently studying in intermediate, presented to the psychiatry OPD with complaints of irrelevant talks, claiming that she is the incarnation of "Goddess Parvathi". She was constantly trying to run away from the house, saying that she must go to Lord Shiva and claimed that she had supernatural powers .

The family members complained about her having excessively high levels of energy, severe sleep disturbances, talking to random strangers on the road, and always laughing to herself. All symptoms started around 5 days ago, which were sudden and abrupt in onset, gradually progressive, and continuous in course. The patient had nil significant family history of substance use disorder, suicide, or psychiatric illness. She had no significant substance-use, medical, or surgical history as well. She was having a well-adjusted pre-morbid personality. According to the patient's parents, who are reliable informants, the patient had suffered 2 backlogs in her final year exams, as a result of which the patient was having low mood, easy fatigability, decreased appetite, and some depressive cognitions for a brief period of 4 weeks about a month back. On Mental Status Examination [MSE] at the time of admission, the patient walked into the Interview room having a broad smile on her face, greeted the doctors and all other patients in the room by herself. She was dressed in excessively bright-coloured clothes. Rapport was easily established with her. Her psychomotor activity was increased. Her speech showed an increased tone, tempo, and volume with decreased reaction time. There was pressure of speech and increased prosody in her speech.

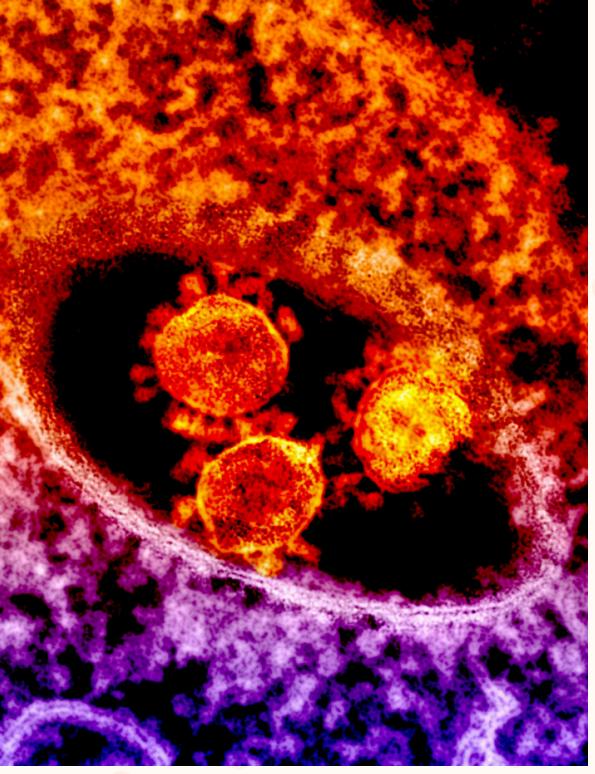
On Thought Examination through Speech Sampling, she was harbouring grandiose delusion. She was also exhibiting flight of ideas in the Stream of thoughts. Her mood was euphoric. Psychometric assessment was done via YMRS [Young's Mania Rating Scale] where she scored significantly high, and a provisional diagnosis of Bipolar Affective Disorder, current episode of mania with psychosis was made. She was started on tablet Lithium Carbonate 900mg in divided doses. She was sedated adequately, and after 7 days, her serum lithium levels were assessed and found to be 0.38mmol/L, and accordingly, her dose was increased to 1500mg per day in divided doses. 7 days later, her serum lithium levels were 0.85mmol/L, which was under therapeutic range of mania. Simultaneously, Tablet Haloperidol 5mg was gradually started and titrated along with Trihexiphenidyl 2 mg, 2nd generation antipsychotics were avoided as the patient was having a very high BMI of 33 Kg/m² and was grossly obese. Over the course of her hospital stay, after 3 weeks since initiation of treatment, there was dramatic improvement in the patient, with attenders claiming 90% improvement in all her presenting symptoms. On re-examination by YMRS, this time she scored significantly lower indicating more than 60% response to the medications. Patient's all other routine blood test and imaging reports were within normal limits .

Finally the patient was discharged with current ongoing medications with a diagnosis of Bipolar Affective Disorder, currently in remission. She was kept on regular follow up. Dosage of Tab. Lithium was slightly decreased to 1200 mg per day to maintain the serum range of 0.6 -0.8 mmol/L. She returned to her premorbid level of functioning after discharge and is on regular follow-ups.

-Minnu Rathod & Rawlo Deepthi, IIInd Year MBBS



RESEARCH CORNER



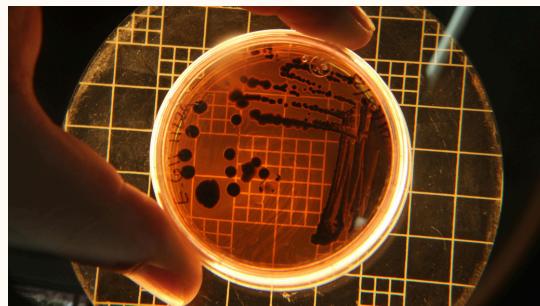
THE SILENT PANDEMIC

ANTIMICROBIAL RESISTANCE (AMR)- EXPLORING STRATEGIES

In the realm of modern medicine, few threats loom as large and menacing as antimicrobial resistance (AMR). This phenomenon, wherein once-conquerable microbes have now evolved to outwit antibiotics, endangers the effectiveness of these life-saving drugs. The World Health Organization (WHO) has sounded the alarm, and has found AMR to have played a role in 5 million deaths in 2021 and been the direct cause of more than a million deaths in 2021, meaning drug-resistant infections killed more people than HIV/AIDS or malaria.

At the core of AMR lies the rampant misuse and overuse of antibiotics. Due to Use of antibiotics, some bacteria die, but resistant bacteria can survive and even multiply. Thus overuse of antibiotics makes resistant bacteria more common. These practices have accelerated the emergence of drug-resistant pathogens, rendering standard treatments ineffective. The casual prescription of antibiotics for non-bacterial infections, failure to complete treatment courses, and self-medication are but a few of the main causes fueling this crisis.

The challenge to overcome antimicrobial resistance (AMR) is a complex and layered endeavour, calling for a unified approach to minimize misuse and overuse, instill accountability in prescribing practices, regulate sales, and rejuvenate the quest for new antibiotics. Amidst this dynamic landscape, the rise of superbugs that outsmart current drugs, underscores the critical need for inventive strategies.



The “Trojan horse” tactic emerges as a beacon of innovation, providing a hopeful path to outmanoeuvre resistant microbes and reclaim the power of antimicrobial therapies. The ingenious concept of Trojan horse strategies is a modern echo of the ancient Greek epic of cunning and guile. Just as the fabled wooden horse of yore concealed warriors within its hollow frame to breach the walls of Troy, today’s scientific “Trojan horses” cleverly disguise antimicrobial agents. These stealthy carriers slip past the formidable defences of resistant bacteria (biofilms and efflux pumps, notorious for fostering antibiotic resistance) delivering their medicinal payload where it can be most effective.

Holding Healthcare Providers Accountable

The role of healthcare providers is pivotal in the fight against AMR. There is an urgent need for doctors to exercise greater responsibility in their prescribing habits. This includes strict adherence to clinical guidelines, judicious use of antibiotics, and comprehensive patient education. Stewardship programs are being championed by governments and health organizations worldwide, aiming to instill a culture of prudent antibiotic use.

Regulating Antibiotic Sales

The ease of obtaining antibiotics over the counter without a prescription is a significant contributor to AMR. The WHO advocates for stringent regulations to ensure antibiotics are dispensed only with a medical prescription. This measure is crucial in preventing self-medication and the consequent rise in resistance.

The Challenge of Antibiotic Discovery

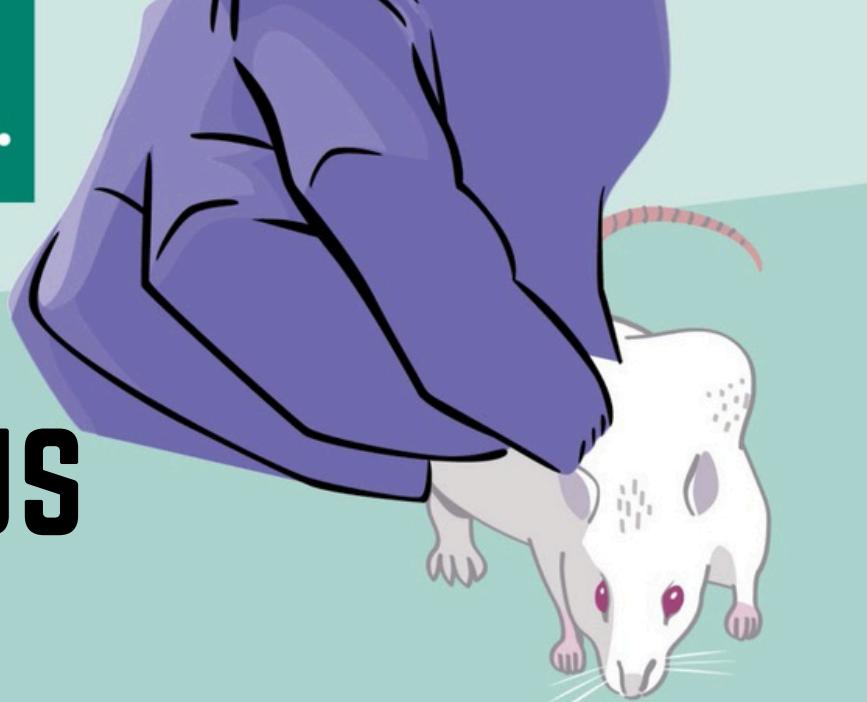
The quest for new antibiotics is fraught with obstacles. The last few decades have seen a dearth of breakthroughs in antibiotic discovery. The process is notoriously arduous and costly, often taking over a decade and having an economic burden with no guarantee of success. Moreover, the spectre of resistance looms large, often manifesting soon after a new drug's introduction, deterring pharmaceutical investment and innovation.



As we stand on the precipice of a new era in medicine, the war against AMR is complex, demanding a global alliance and unwavering resolve. It is a testament to human ingenuity and a reminder that most formidable foes can be outwitted by the timeless art of deception, repurposed for the greater good. In this ongoing pursuit, may our scientific acumen and collaborative spirit be the 'Trojan horses' that lead us to victory over the superbugs of our time.

Dr Mohammed Ismail Siddique
Postgraduate, Department of Microbiology

**Zika virus kills
neuroblastoma in mice.**



ZIKA VIRUS THERAPY



POSSIBLE ONCOLYTIC TREATMENT OF NEUROBLASTOMA.

Neuroblastoma is the second most common childhood tumour. It is a cancer that typically develops in the sympathetic nervous system and the adrenal gland. Almost 40% of the patients are of age less than a year when diagnosed. More than half of the patients with high risk neuroblastoma don't respond to chemotherapy or radiation, or they respond initially, but develop a recurrence. It accounts for almost 15% of childhood cancer deaths.

In search of therapies to neuroblastoma, scientists assessed the oncolytic potential of ZIKA virus. A research sci.....

ZIKAV, is an emerging mosquito borne pathogen unique among flaviviruses because of its association with congenital defects. Recent studies have shown that neuronal progenitor cells are likely the human target of Zika virus.

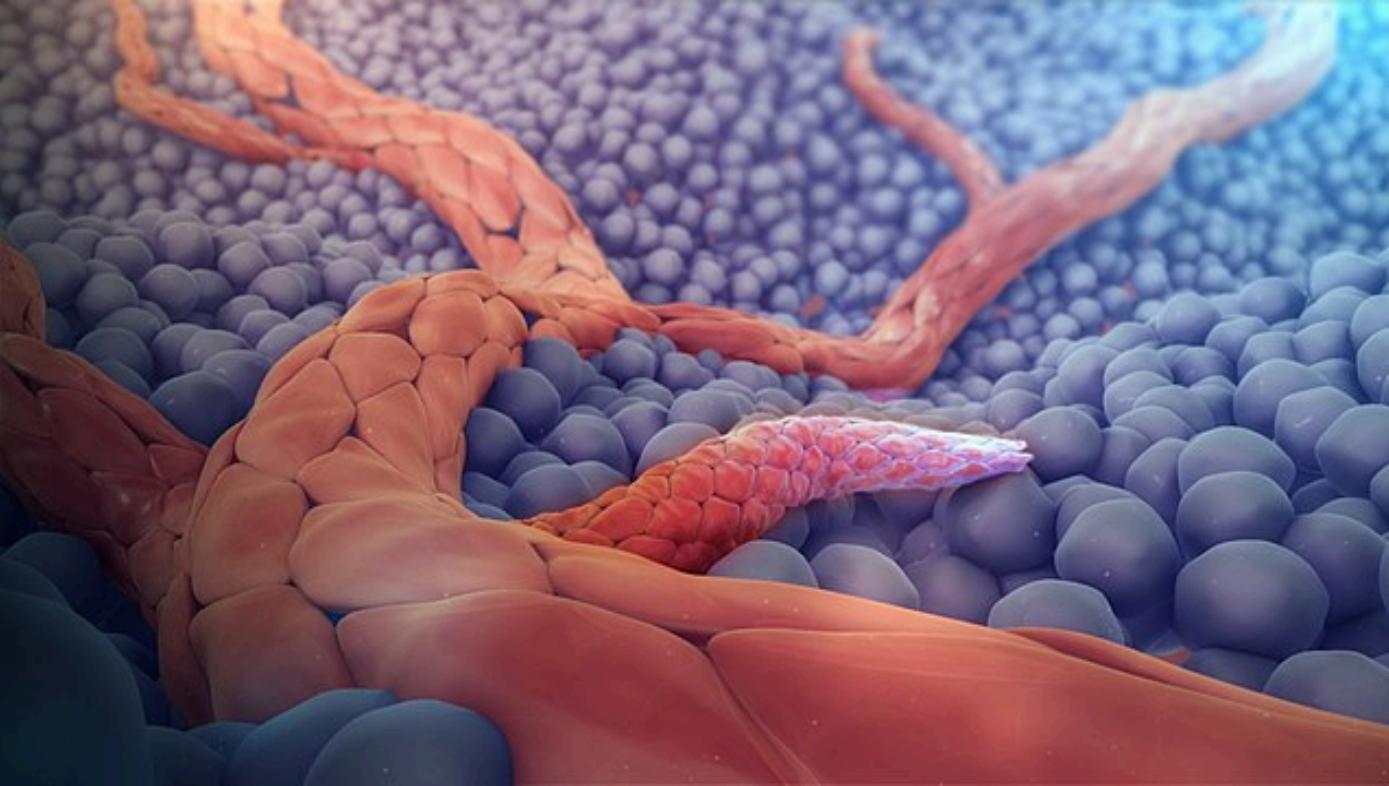
Neuroblastoma cells are widely permissive to Zika infection, revealing extensive cytopathic effects(CPE) and producing high titres of virus.

To determine whether treatment with Zika virus is likely to help human patients survive longer, the researchers developed mouse models of human neuroblastoma tumours, testing them with either Zika virus or a saline solution. Twenty-eight days later, all tumours that received the saline solution had grown by as much as 800%. The tumour models that had received Zika had shrunk to approximately 12% of the original mass, which was confirmed to represent scar tissue rather than the tumour cells. After four additional weeks, no further tumour growth was detected, suggesting that patients treated with Zika virus would be more likely to survive.

Assessments from both primary pretreatment and recurrent post-treatment isolates, confirmed that permissive sensitivity to Zika killing was dependent on the expression of CD 24, which was highly expressed in neuroblastoma and conferred a proliferation advantage to tumour growth. CD24 is a sialoglycoprotein with variable glycosylation that is cell type specific. It is recognised as a cancer stemness marker and is correlated with both tumour progression and poor prognosis of some cancers. CD 24 elucidates both simultaneous proliferative advantage for tumour and its consequent alternative role as a predictor for Zika permissiveness.

So, with further validation and research, Zika virus could be an extremely effective bridge therapy for patients with high risk neuroblastoma. It can serve as an adjunctive treatment by targeting tumour cells that can lead to recurrent disease and treatment failure.

-Rishta Erukulla, IIInd Year MBBS



BEYOND BLOCKAGES

UNVEILING THE HEALING POWER OF ANGIOGENESIS IN ISCHEMIC DISEASE

Ischemic Heart Disease (IHD), characterized by reduced blood flow to the heart muscle, remains a leading cause of morbidity and mortality worldwide, necessitating continuous exploration of innovative therapeutic strategies. Many patients with ischemic disease develop angiographically visible collateral vessels. Initial research focused on enlargement of pre-existing collateral vessels, termed "neoangiogenesis" by Wolfgang Schaper. However, true angiogenesis, involving the sprouting of new vessels from existing ones, is also observed recently. Recognizing the potential of angiogenesis as a therapeutic target, researchers have endeavored to develop interventions promoting the growth of new blood vessels in ischemic tissue. This includes the administration of angiogenic vascular endothelial growth factor (VEGF) and fibroblast growth factor (FGF), either through recombinant protein therapy or gene delivery approaches. Additionally, cell-based therapies utilizing endothelial progenitor cells or mesenchymal stem cells have shown promise in augmenting angiogenesis, improving myocardial perfusion. Preclinical investigations in animal models have explored the potential use of growth factors for the same. According to Sun et al, Novel therapeutic targets, including microRNAs and non-coding RNAs involved in angiogenic signaling pathways, present opportunities for the development of precision therapies tailored to individual patient profiles. Furthermore, advancements in drug delivery systems and tissue engineering techniques offer the enhanced efficacy and targeted delivery of angiogenic agents to ischemic cardiac tissue. Despite promising outcomes from clinical trials, therapeutic angiogenesis is still in its nascent stage of development. So, sustained interdisciplinary collaborations and translational researches are currently going on in the esteemed hospitals of China and UK to fully exploit angiogenesis' therapeutic potential.

-Divyanshi Gupta,
MBBS Final Year Part -1

BREAKING THE MOLD

INNOVATIONS IN OSTEOPENESIS IMPERFECTA MANAGEMENT

Osteogenesis imperfecta (OI), characterized by abnormal synthesis or processing of type 1 collagen, is colloquially termed "brittle bone disease." With an incidence risk of 6.5 per 1,000 live births between 1992 and 2019, its management strategies have evolved significantly over time. In mild cases, emphasis is placed on avoiding activities prone to trauma and promptly addressing fractures. For moderate to severe forms, rehabilitation and orthopedic interventions, including managing acute fractures, are pivotal. Severe cases may necessitate intramedullary rod insertion with osteotomy. Traditionally, surgical correction of deformities, physiotherapy, and the use of orthotic devices have constituted primary treatments. The most notable advancement in pediatric OI management over the past decade is the integration of bisphosphonate therapy, originally employed in 1970 to enhance bone mineral density. Its modern applications extend to moderate to severe OI cases. A multi-drug therapy approach is now recognized as essential. Occupational therapy plays a central role, particularly in severe OI manifestations, aiding in enhancing mobility and daily functioning. Medical interventions encompass a range of approaches, including sex hormone administration, gene therapy, cell transplantation, and the use of antibodies targeting transforming growth factor Beta and Denosumab. Orthopedic strategies encompass orthotic utilization, managing long bone fractures, addressing deformities, and prophylactic intramedullary rod insertion. This comprehensive approach underscores the complexity and interdisciplinary nature of OI management.

-Samba Sowmya,
MBBS Final Year Part -1



WOMEN'S HEALTH GAP



The health gap between men and women is a persistent issue, with women often being underdiagnosed for certain conditions compared to men. Women tend to live longer than men, but with a lesser quality of life, as they are more likely to suffer from multiple chronic conditions throughout their lives. According to a report from the WORLD ECONOMIC FORUM and MCKINSEY HEALTH INSTITUTE, women spend 25% more of their lives in debilitating health than men. In 2019, a study in Denmark of almost 7 million people found that women were diagnosed with hundreds of health conditions when they were, on average, four years older than men. Diagnoses for diabetes came four years later for women, while cancer was diagnosed on average two and a half years later in women.

Researchers surmised that a combination of genetics and environment could be at play, but that gender bias might also be partly responsible for the differences. The following years saw the COVID-19 pandemic disrupt access to healthcare globally, disproportionately affecting women. At Davos in January 2024, the World Economic Forum launched the Global Alliance for Women's Health to change how women's health is funded and prioritized to close the health gap. World Health Organization (WHO) equates 75 million years of life lost due to poor health or early death each year, and closing the gap would give 3.9 billion women in the world today an extra seven healthy days per year, or an average of 500 days over a lifetime. By doing so, it could boost the GLOBAL ECONOMY by \$1 trillion by the year 2040.

Many people are aware of hallmark symptoms of a heart attack, which include chest pain, pain in arms, back/jaw, nausea, unusual fatigue, sleep disturbances, and shortness of breath.

However, only one-third of women experience these symptoms during a heart attack. In the UK, women are less likely to receive a coronary angiogram after experiencing a STEMI heart attack. Despite being more likely to die after severe heart attacks, women are often prescribed medication like statins to prevent future incidents.

Endometriosis, often termed the "missed disease," remains underdiagnosed globally, affecting 10% of women and girls of reproductive age, with diagnosis delays particularly common among black women. In autism, girls are frequently diagnosed later or not at all due to medical gender bias, as symptoms may differ from those seen in boys. In the US, less than 1% of women have been diagnosed with ADHD(ATTENTION DEFICIT HYPERACTIVITY DISORDER), but this number is rising rapidly.

Autoimmune conditions disproportionately affect women, with an estimated 80% of sufferers being female. Scientists at STANFORD UNIVERSITY have identified a molecule unique to women that triggers autoimmune responses, potentially explaining the higher prevalence of these conditions in women. Autoimmune disorders such as thyroid issues, lupus, psoriasis, multiple sclerosis, and rheumatoid arthritis involve the body's immune system attacking itself. SOCIAL DETERMINANTS, including socioeconomic status, geographic location, and race/ethnicity, play significant roles in women's health disparities. Every woman deserves access to quality healthcare when and where she needs it. Achieving this requires a thorough examination of the state of the women's health gap and identifying disparities to inform effective strategies and policies for better health outcomes.



UNVEILING THE INTRICACIES OF IMMUNE RESPONSE TO FOOD

THE CASE OF ORAL TOLERANCE AND ALLERGY

Food, the sustenance of life, poses a fascinating paradox in immunology. Despite being a composite mixture of potentially antigenic molecules, the majority of the time, our bodies exhibit remarkable tolerance towards ingested food. This phenomenon, known as oral tolerance, is a complex interplay of digestive processes, barrier mechanisms, and immunological responses. However, this delicate balance can be disrupted, leading to food allergies. Let's delve deeper into the mechanisms that allow us to peacefully coexist with the food we consume while exploring its involvement in allergy.

Reduction of Immunogenicity:

Digestion is the first line of defense against potentially immunogenic food molecules. Enzymes in saliva, stomach, and intestine, along with gastric acid, break down food, reducing its immunogenicity by destroying conformational epitopes.

Barriers:

The intestinal epithelial barrier acts as a formidable wall between the contents of the intestine and the host's immune system, preventing the inappropriate activation of immune responses to harmless dietary components.

Oral Tolerance:

Central to the phenomenon of oral tolerance is the concept that ingestion of a protein leads to a state of hypo-responsiveness to that protein upon subsequent immunization. Although dietary antigens undergo partial degradation upon reaching the small intestine, some intact antigens are absorbed, playing a pivotal role in oral tolerance.

Mechanisms of Oral Tolerance: the mechanism of oral tolerance varies depending on the dose of antigen intake.

Low Dose:

At low doses, active cell suppression of the immune response occurs, mediated by the secretion of potent immunosuppressive cytokines such as TGF- β , IL-4, and IL-10. These cytokines dampen the immunological response against orally ingested antigens.

High Dose:

Conversely, at high doses, clonal anergy or clonal deletion of T cells occurs. Clonal anergy involves the functional inactivation of T cells, leading to a decrease in delayed type hypersensitivity (DTH) response. Th1 cells, responsible for DTH response, are inhibited by IL-4 secreted by Th2 cells, which are preferentially stimulated by orally administered antigens upon continuous feeding on a large scale.

Involvement in Allergy:

Despite the intricate mechanisms of oral tolerance, the delicate balance can be disrupted, leading to food allergies. In individuals with food allergies, the immune system mistakenly identifies specific food proteins as harmful and mounts an immune response, leading to allergic reactions ranging from mild discomfort to life-threatening anaphylaxis.

The intricate orchestration of digestive processes, barrier mechanisms, and immunological responses ensures that the majority of the time, we peacefully coexist with the food we consume. However, understanding the mechanisms of oral tolerance and its involvement in allergy not only sheds light on fundamental aspects of immunology but also holds implications for the development of therapies for food allergies and autoimmune diseases.

-K. Annmary, IIInd year MBBS



MED TRIVIA

RIDDLEM3D



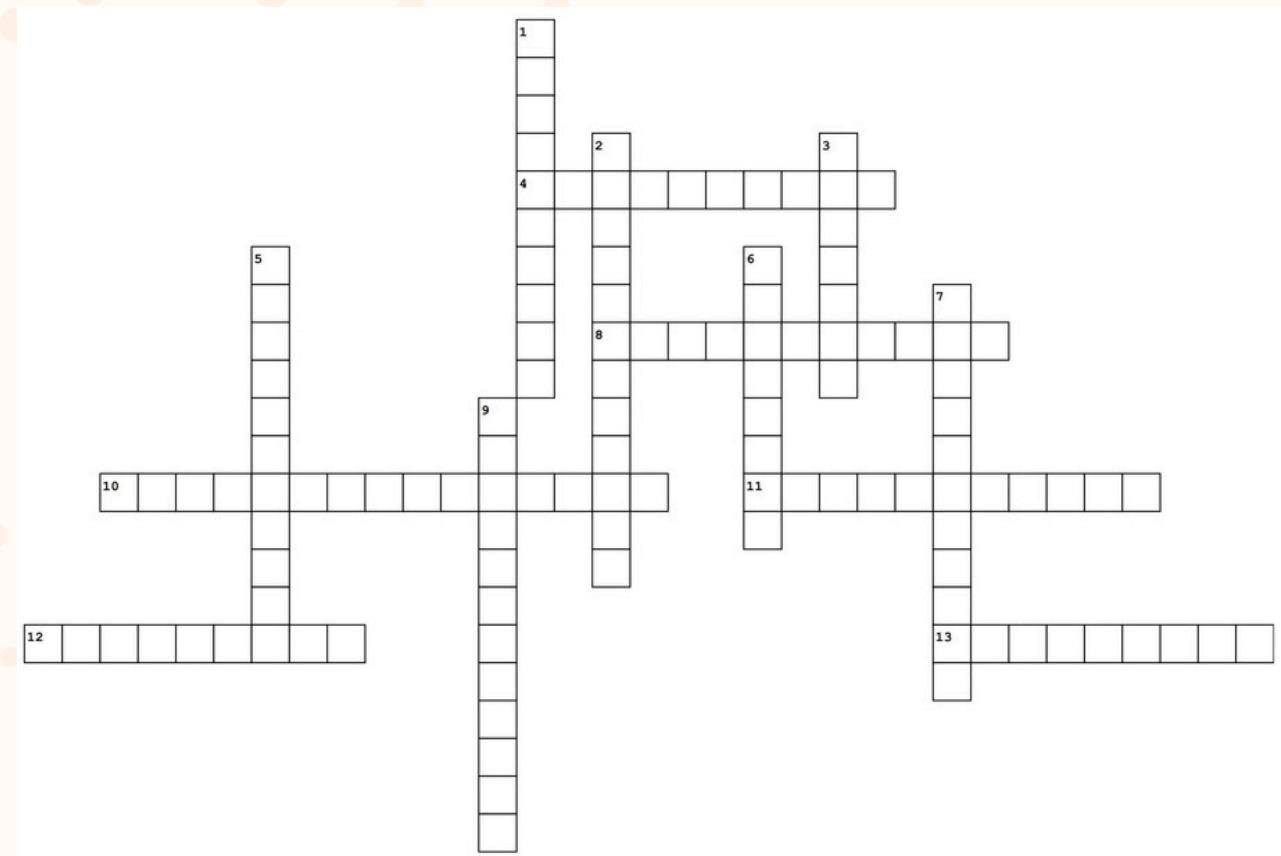
- I'm the seahorse of memory, where tales are told.
Forming new memories, as the days unfold
What am I, in this memory's hold?
- I am the thinkers crown, with folds and grooves so deep.
Consciousness, thoughts and dreams in my keep.
What am I in this cognitive sweep?
- In the microscopic world, I reign with might,
Evading drugs, in an unseen fight.
Once conquered easily, now I evolve,
Against treatments, my resilience revolves.
In hospitals' corridors, a silent dread,
What am I, amidst this thread?
- I am programmed, a cell's final cue,
Dancing gracefully, bid adieu.
In life's cycle, I play my part
Ensuring harmony, within the heart.
Yet in balance, I maintain the tone
What am I in the cellular zone?
- In Garden's green, I first take root
But in the lab, I find pursuit
I widen eyes, hearts I do race
In emergency's swift paced chase
From poison's grasp to healer's delight
What am I in medicine's light?



PAGMAIHDR (ANS: DIAPHRAGM)

- TKEEOSNL.
- OPCOSIAH.
- IANLSPTAR.
- NRALYX.
- MUULERNF.
- ERAOCN.
- UNOIEPMRET.
- HAIEYLN.
- PNCESARA.

CROSSM3D



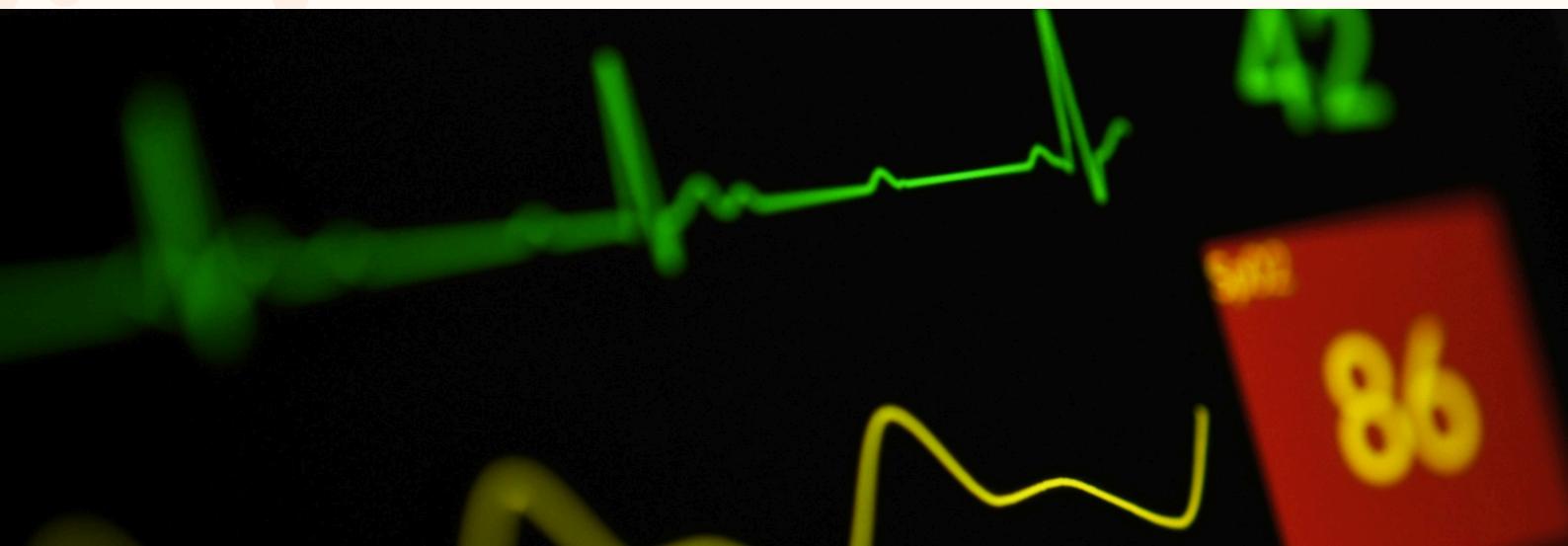
Across

- 4. Drugs that promote saliva secretion
- 8. Characteristic feature of congested liver
- 10. Accumulation of fat and cholesterol in artery walls
- 11. Lie detector drug
- 12. 'P' in DPT vaccine
- 13. First line treatment for TB

Down

- 1. Decreased saliva secretion is known as
- 2. Leadpipe and cog wheel rigidity found in
- 3. German measles
- 5. Inflammation of eyelids
- 6. Bulge in the wall of an artery
- 7. Headache in medical terms
- 9. Congenital megacolon

INTERNSHIP DIARIES



- The day started off like any other until our batch group erupted in discussion about one and only one topic: the release of our final year results. It felt like the end of an era. That single pdf held within it the culmination of countless sleepless nights and endless revisions. The transition from medical student to Doctor, though expected, left us in a profound daze. For the majority of us, our initial reaction was to inform our parents and update our social media statuses and profiles. After all our hard work, announcing to the world that your resident nerd was now a doctor felt like the least we deserved.

Then came our first duty day. We were proud, we were jittery, it was all so thrilling. We may have hoped for a warm welcome or a memorable event to mark the occasion, but it all passed in a blur. This is not to say that it was uneventful; before we could settle into our new roles as interns, we were swamped with duties. From checking on patients to administering medications, each task felt like a milestone in our journey. Successfully inserting a cannula on your first attempt was an achievement that one would have written in their memoir. For others, it was getting their first ABG right. Poisoning cases were abundant. On one bed, we were administering atropine to counter OP poisoning, whilst trying to evade the effects of atropine psychosis, whereas on another, we found ourselves managing a seemingly calm patient experiencing BZD overdose. All the treatment protocols we had only read about came into application, but when the patient arrived with dettol or Lysol poisoning, it truly left us scratching our heads.

The patients in the wards, though ill, were full of vigor and hope. In stark contrast, the atmosphere of the ICU was heavy with desperation. Death, once a philosophical concept, discussed among our friends, became an undeniable reality-a palpable presence that loomed before us. Nothing could have prepared us for the moment we feel a life slowly slipping away from under our hands. As their feeble pulse dims down and fades into oblivion, your heart pounds in your chest, and for a fleeting moment you consider the possibility of sharing your own heart beats. All the while, your hands are pumping rhythmically on their chest in hopes of restarting their lives, while the anguished cries of their loved ones echoes distantly in your ears. The adrenaline surge takes you to an otherworldly realm, while the desperate pleas keep you tethered to reality. Maybe, just maybe, you were mistaken; the pulse was still there, just light enough to go unnoticed. But time doesn't wait, as you would be just beginning to come to terms with reality, you would be needed elsewhere, another critical case, another life hanging on a balance. This experience left an indelible mark on our souls, bringing about the true transition from medical students to doctors.

Stoke cases pose an uphill battle, ensuring the patient remains stable while conducting thorough assessment and administering treatment proved to be a challenge like no other. As the cases wore down our resilience, we found solace in the steady ticking of the clock, each passing second bringing us closer to the end of our shift. And as we awaited the arrival of the professors to relieve us for the day, the only thing keeping our weary minds alert and our spirits alive was the oath we took; to cherish and preserve each life to the fullest. We matured more in the span of a single day than we did in our four years of MBBS.

P.S.- Despite the demanding duties, we are immensely grateful for the guidance and support of our seniors, who helped us navigate our duties with relative ease. It wouldn't have been possible without their support. Whilst our education taught us what to do, they taught us what not to do.

A shout out to M4, who made my first posting as intern a truly enjoyable experience.

ONE AMONG US



Dr. Sudheer Prudhvi is a Senior Resident in the Department of Pharmacology, from the batch of 2019. He completed his undergraduate studies at Rajiv Gandhi Institute of Medical Sciences, Kadapa. Renowned among students for his exceptional teaching methods, he leaves a lasting impression on every student. He firmly believes in enjoying the journey towards one's goals, confident that success will definitely follow if not immediately attained. The following is a glimpse of the interview in which he has shed light on various aspects of medical education and his approach to learning:

Q: What inspired you to pursue a career in medicine?

A: During my schooling and intermediate education, Maths, Physics, and Chemistry were my favorite subjects. MBBS was not in my plans, It was something that happened by chance. Clearing the state entrance exam and getting into a medical college brought huge social upliftment to me and my family. However, after MBBS, I wanted to pursue Pharmacology because that is the only subject that excites me till date.

Q: What is the most cherished moment of your Undergraduate days?

A: I'm a person who lives in the moment. My entire UG life was unforgettable. But there is one special memory that stands out from the rest. I scored the least marks in my batch in the first internal exam of Community Medicine in my third year. I was not scared until my professor dropped the bomb about detaining those who didn't pass the next internals. I worked very hard out of fear of getting detained and scored the highest. The professor couldn't believe it at first, had to double-check, but ended up giving me props for all that hustle.

Q: Can you share how your relationship with your teachers was?

A: One of my high school professors, Narendra sir, who taught me Maths had a profound impact on shaping me during my schooling. Rajgopal sir and Sambasivarao sir were my torchbearers in my intermediate. The star mention is Dr. Govind Rai Garg sir, who teaches Pharmacology. He has influenced my teaching style. All of them have made me realize that 'Teaching is an Art and not everyone is an artist'. You can observe their teaching style in my class because that is the kind of impact they had on me.

Q: What inspired you to pursue teaching as a senior resident?

A: As far as I remember, I took seven classes for the 2019 batch and asked them for their reviews in a Google form. Their overwhelming response left me teary-eyed. Such positive responses from my students fuel my commitment to work harder every day and give them quality education. In addition to this aspect, I look forward to all forms of criticism which help me improve and teach better.

Q: How do you prepare for a class?

A: The main mantra that I follow to prepare for a class is 'to go from the known to unknown.' I start from the basics and then proceed towards the new concept because once you have a solid grasp of your existing knowledge, you can delve deeper into related areas to expand your understanding further. I'm a strong believer in the fact that "If you can't explain it to a first-year student, you did not understand it yourself in the first place."

Q: How do you approach adapting complex medical concepts to suit the learning style and comprehension level of UG students?

A: Pharmacology can be perceived as a dry subject; therefore, as a teacher, I try to make it as exciting as possible. Using mnemonics, stories, and songs, and associating them with complex theories help students remember them forever. A pattern that I use is to associate medical concepts with emotions like love, which the students find rather engaging. At the end of the day, I want my students to remember as much as they can and not miss any question that appears in their exams.

Q: How do you stay updated with the latest teaching methods and medical advancements to teach your students better?

A: For understanding any topic, I go through standard textbooks like Goodman Gillman, Katzen, Harrisons, and KD Tripathi. I also review research papers and journal articles on WHO and FDA websites whenever necessary because the subject gets new updates quite frequently.

Q: How has teaching UG students influenced you?

A: At a personal level, I consider myself very fortunate to have such curious minds that bombard me with doubts and questions. This has helped me improve my patience. I am now calmer and can help students with every minute detail regarding the subject.

Q: How did your undergraduate days influence your approach to teaching today?

A: After internship, I gave the PG entrance exam where I scored an unexpectedly bad rank. That made me realize where I stand as a medical graduate. After a year of dedication and effort, I aced the next attempt and got into my favorite branch, Pharmacology. I realized that the lack of proper guidance and resources throughout my undergraduate days has led to the unfortunate result in my first attempt. The discontentment that I experienced motivates me to provide for my students and see them satisfied.

Q: What are your goals as you proceed further through this profession?

A: My main goal is to make sure my students are happy and satisfied, and when they are, I feel fulfilled.

Q: What is your advice for UG students?

A: The effort and sacrifice you put into MBBS serve as the foundation for future challenges, such as getting through the PG entrance exam and opting for your specialty. Selecting your PG branch is as important as choosing your life partner. The branch you opt for decides the life you are going to lead. So, be cautious and choose wisely.

INTERMEDICS : CELEBRATING SPORTSMANSHIP

Kakatiya Medical College in Telangana recently played host to the second edition of the Intermedics event organized by KNRUHS, marking a milestone for medical education in the region. The gathering served as a dynamic platform for medical students to cultivate gamespirit and foster collaborative learning. With participants from various medical institutions showcasing their expertise and passion for the field, the event undoubtedly left a lasting impression, contributing to the advancement of medical fraternity and unity in the region.

Over fifty colleges enthusiastically participated in this multifaceted event, showcasing their prowess in a plethora of sports and games ranging from cricket, basketball, badminton, and chess to, kabaddi, volleyball, and table tennis. Athletics, an integral part of the intermedics, further elevated the excitement and competitiveness of the event.

The women's intermedics segment commenced on the 26th of March, culminating on the 29th of March. Amongst stiff competition, Gandhi Medical College, Hyderabad, emerged victorious, clinching the overall championship title. Kakatiya Medical College secured a commendable second position, while Osmania and Mamatha Medical Colleges shared the third spot. Our own institution, Kakatiya Medical College, showcased exceptional talent across various disciplines, notably excelling in games like kho-kho.



During the exhilarating Men's Intermedics event, spanning from April 13th to 16th, a fierce competition unfolded across various sports, igniting the spirit of camaraderie and sportsmanship among participants. With every game played, the atmosphere was electric as teams vied for supremacy. In a remarkable display of talent and teamwork, Kakatiya Medical College, Hanumakonda emerged as the overall champions for the men's division, showcasing their prowess in volleyball, kho kho, and securing a commendable runner-up position in badminton. Yet, the anticipation reached its peak as the spotlight shifted to the culminating matches of football and cricket, commencing on April 20th.

The ultimate showdown between KMC and OMC in the Football final unfolded with breathtaking intensity. In a testament to their evenly matched skills, neither team managed to secure a decisive victory within regulation play. As tension mounted, the fate of the championship rested on the thrilling penalty shootout. In a nail-biting series of events, both teams demonstrated unwavering determination, matching each other shot for shot in the first two rounds of penalties, leaving the spectators on the edge of their seats. It was in the third round that Kakatiya Medical College etched their name in history, clinching victory with a decisive goal, amid thunderous cheers from their supporters.

The resounding triumph not only crowned Kakatiya Medical College as the cricket champions but also elevated the event's excitement to new heights. The collective anticipation and fervor among students underscored the significance of sports in fostering a sense of unity and pride within the academic community. As the winners basked in their well-deserved glory, the spirit of sportsmanship prevailed, enriching the Intermedics experience for all involved.

KMC had dominated every knockout stage match in cricket, confidently paving their way to the finals. However, their opponents, the spirited students of Gandhi Medical College, proved to be formidable contenders. While many anticipated an easy victory for KMC, fate had other plans. Despite their valiant efforts, KMC ended up conceding the match and settling as the runners-up. This Intermedics tournament was a rollercoaster ride for all involved, teaching invaluable lessons in loyalty and sportsmanship. It underscored the unpredictable nature of competition and the importance of resilience in the face of defeat.

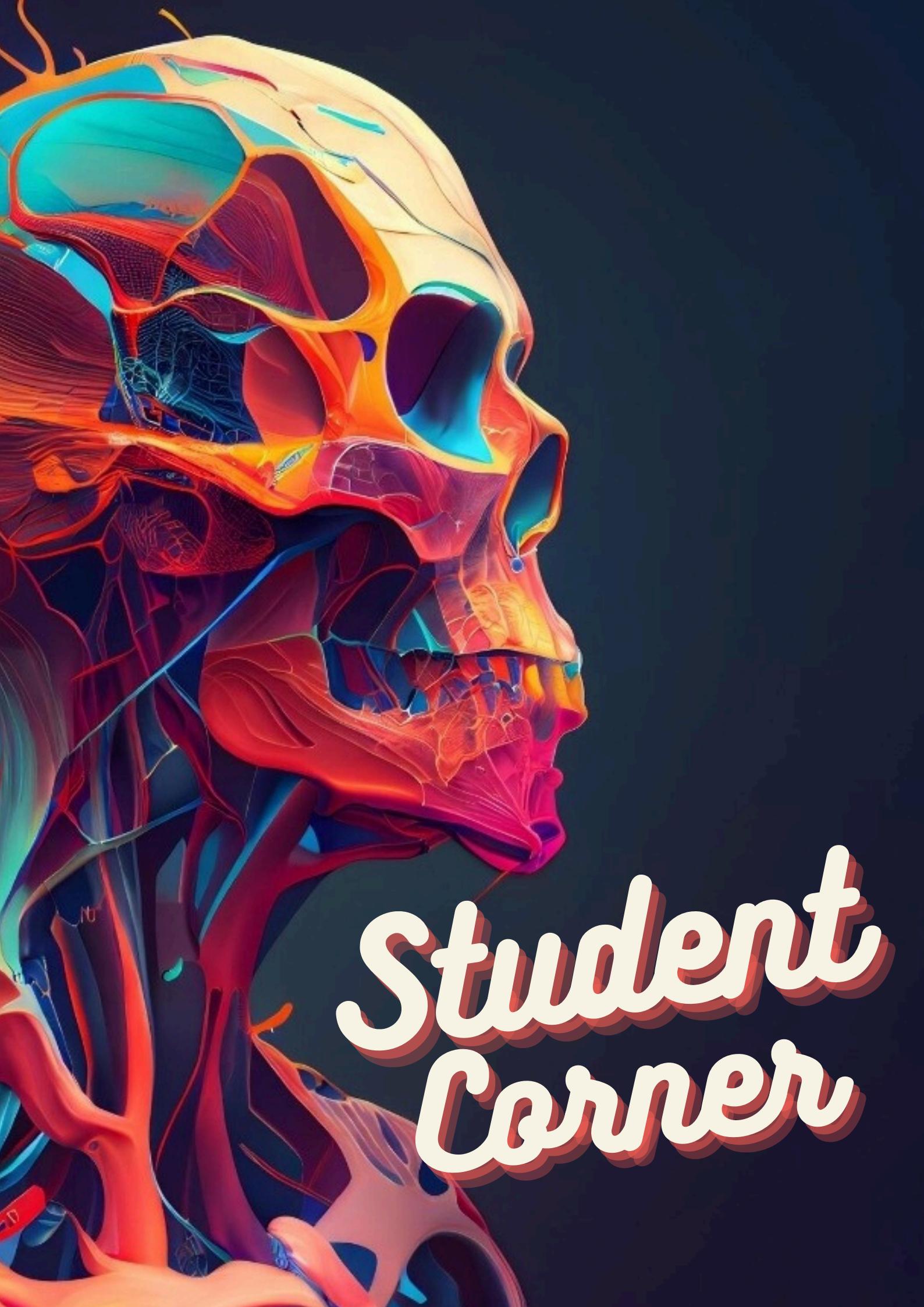


PROJECT PADS

MENSTRUAL HYGIENE AWARENESS CAMPAIGN



- Project Pads, a menstrual hygiene awareness campaign was organized by the students of KMC, with the support of our Principal, Dr. Divvela Mohan Das sir and the Social Welfare Wing of Kakatiya Chronicles, under the guidance of SCORA MSAI - Medical Students Association India. In many parts of India, menstrual hygiene remains a taboo subject, leading to a lack of awareness and inadequate access to menstrual products and facilities. To combat this issue and empower girls with essential knowledge, we conducted a menstrual hygiene awareness campaign at KGBV - Kasturba Gandhi Balika Vidyalaya, Hasanparthy, on April 19, 2024. We addressed almost 200 girls aged 12-16, providing them with a safe space for open dialogue, allowing them to ask questions and share their experiences. Sessions on the menstrual cycle, proper hygiene practices, and the importance of using hygienic menstrual products were conducted. We demonstrated exercises that provide relief from menstrual cramps and maintain menstrual health. Volunteers also spoke on topics like puberty, reproductive anatomy, menstrual abnormalities, period tracking, and menstrual nutrition. Many KMC students contributed to the donation of menstrual products, such as sanitary pads, menstrual cups, or reusable cloth pads, to all the girls. Some of us volunteers contacted the principal of the school and advocated for improved sanitation facilities in their school, ensuring that girls can manage their periods with dignity and comfort. Through this educational initiative, girls can gain valuable knowledge that empowers them to make informed decisions about their health and well-being. Through continued efforts and community support, we can work towards a future where menstruation is no longer a source of shame or stigma but a natural and celebrated aspect of women's health.



Student Corner

THE CRUSHING WEIGHT OF LOVE!

What is Love?

Is it an emotion? Is it an attachment?

Is it a feeling? Is it magic?

Or is it all of them? The definition varies from person to person. Some call it beautiful and others call it trash, I'm not here to debunk anyone's opinion but to explain what and why it is like that.

In the beginning stages of love, there's a rise in Cortisol along with the Serotonin downfall! This is the causal factor for the initial intrusive terrors and hopes of attachment. Then comes the quartet of Dopamine, Norepinephrine, Oxytocin and Vasopressin which deepen the emotions of attachment providing feelings of calmness, contentment and dependability upon mate bonding.

The emotion of love also causes deactivation of the neural pathways for detrimental emotions like fear, angst and social judgement.

The signs of falling in love are most notably, racing hearts, blushed cheeks, stammering words and sweaty palms, all caused by the flooding of chemicals in our brain.

It's parallel to feelings of euphoria succeeding the intake of cocaine or alcohol as it releases high levels of dopamine and activates the reward circuit i.e. the Ventral tegmental area' along with the Hippocampus, Prefrontal cortex and Amygdala.

Over time, love, what starts as an intense and fiery emotional stressor manifests itself into a shield against the same, guarding against the terrors of the reality of life.

Love is strange. Love is clingy. Love is cryptic It's not just another emotion one tends to experience, it's something beyond words, something even beyond science!

May those who are in love, fall deeper and those not, be lucky enough to experience!

- Sandeep Mane,
IIInd Year MBBS





ART CORNER

"The dissection of Mona Lisa"

How did Leonardo da Vinci contribute to the muscular system?

Leonardo concentrated on the bones and muscles, analysing the body in purely mechanical terms and adopting a range of illustrative techniques to make his drawings as clear as possible. He depicted the shoulder stripped down in stages, and the hand built up layer by layer.

The immense pioneering anatomical work of Leonardo preceded the work of the father of anatomy, Andreas Vesalius (1514–1564), by at least a generation.

-Harita, First Year MBBS

A METAMORPHOSIS ON FLOOR CANVAS



In a recent celebration of both artistry and academia, all of us have witnessed a vibrant spectacle of Rangolis depicting Histology and Gross Anatomy diagrams which graced the halls of our medical college.

On the 25th of January, 2024, the Department of Anatomy organized "The Alchemy of Art- A Metamorphosis on Floor Canvas" for Freshers. The overwhelming response from the students of 2023 was immensely applauded by everyone for the efforts they put in.

The faculty played a crucial role in guiding them through the event, providing valuable insights and advice. Each Rangoli design not only showcased the beauty of the human body, but also highlighted the importance of understanding its inner workings. These colorful patterns reminded us of the beauty inherent in the study of histology and gross anatomy, and the importance of artistic expression in the pursuit of knowledge.

Through this creative endeavor and mentorship of faculties participants not only honed their artistic skills but also deepened their understanding of the subject matter.

-Sanjana Yamsani & Vaishnavi Reddy,
1st year MBBS

BREAST CANCER AWARENESS



Breast cancer is the most dreaded cancer among women, often shrouded in stigma that hampers timely detection and treatment, leading to its advancement to later stages. Despite being well into the 21st century, there remains a societal reluctance to openly discuss and confront issues related to breast health. It's important to amplify awareness about this condition and empower women about the importance of regular self-examination techniques, which can aid in early detection and potentially save lives. The iconic "pink ribbon" serves as a global emblem of breast cancer awareness, rallying support for this important cause. Let's unite in our efforts to raise awareness, foster education and work towards a future where breast cancer is identified early and managed effectively.

- Mithila Katagouni, 1st Year MBBS

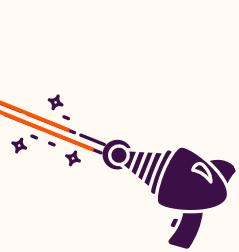


Art
- Vaishnavi, 1st Year MBBS



Embroidery
- Yogita, 1st Year MBBS

PRECISION GAME



Robotics technology is making a huge impact on the field of medicine. Robots are being used in various ways to improve patient care, from performing surgeries to assisting with rehabilitation.

With advances in contemporary robotics, surgeons can now perform minimally invasive procedures with greater precision. These robots offer several advantages, including improved visualization, hand tremor elimination, micromovement capabilities, and reduced tissue disruption. All these advancements have led to faster recovery and fewer complications in patients.



The development of a sense of touch for robotic instruments is going to play a major role in improving safety and reducing tissue injuries. Current advanced robotic systems are equipped with highly dexterous and miniaturized instruments, which shows promising hope for the invention of even more compact and lightweight instruments. Advancements in virtualization, AI, and machine learning models will play a crucial role in imaging, identifying small structures, and aiding in decision-making during surgery.

From the experience of my surgery posting, I observed that performing a procedure on feet for longer durations can be tiring. Robotics can tackle this challenge with a comfortable ergonomic setup for surgeons. Though they are capable of assisting with minor procedures, current robotics technology still has limitations in terms of instrument dexterity, sense of touch, complex setup times, and high cost.

Nevertheless, with future advancements such as AI-driven automation, nanorobots, microscopic incision surgeries, semi-automated telerobotic systems, and the impact of 5G connectivity on remote surgery, the growth curve of robotic surgery points to significant innovation and stands as a testament to the persistent pursuit of progress in healthcare.

-V Deekshith,
2nd year MBBS



BY DR. SAGNIK MUKHERJEE,
FINAL YEAR POST-GRADUATE
DEPARTMENT OF PSYCHIATRY

SERIAL KILLERS AND CRIMINAL PROFILING: THE ENIGMA OF CRIMINAL PSYCHOLOGY

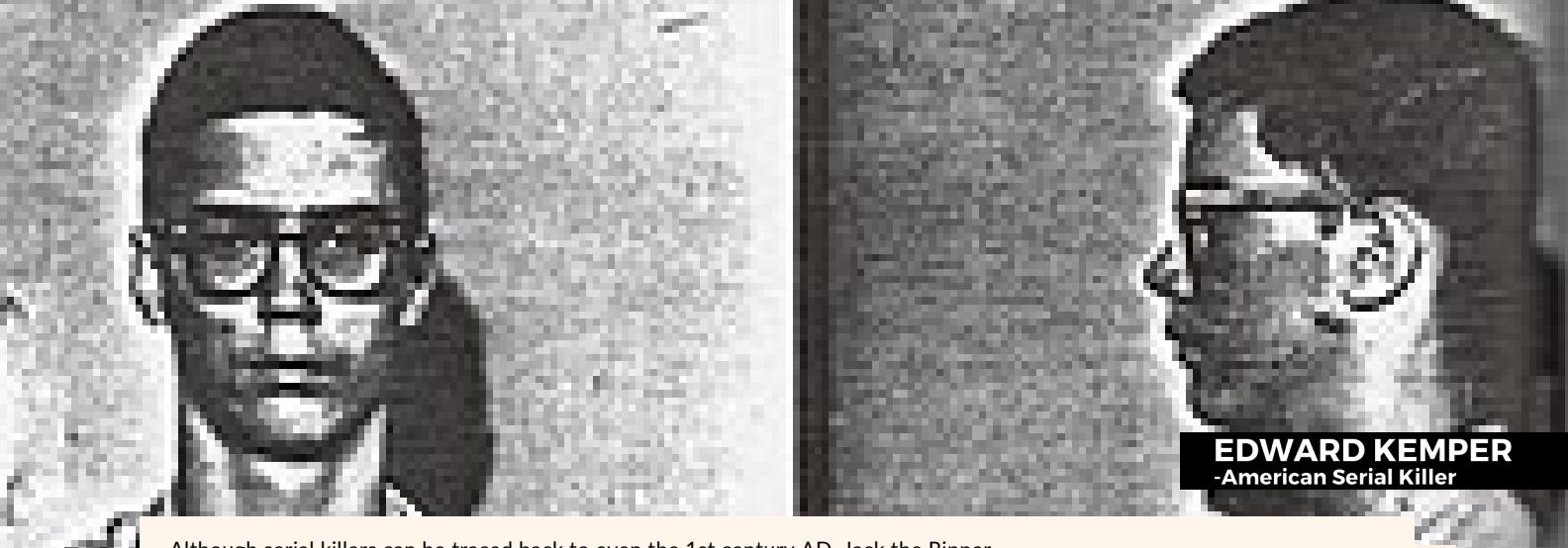
There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy."

--- William Shakespeare, Scene 5, Act 1, Hamlet

Disclaimer: The following article contains depictions of mature themes of violence, murder and sexual violence. So if you're uncomfortable with such subject matter, then I suggest not reading this article.

That said, the human mind and behaviour are incredibly complex and intricately designed. To understand exactly how it works, we need to delve into the darkest side of the human psyche, as enlightenment can only be achieved after passing through, overcoming, and understanding the darkness within.

1888. London. Not only the capital city of United Kingdom of Great Britain and Ireland, but also the virtual capital of the world. It's almost 9 PM at night. The streets are bustling with activity but shadowed by the challenges of Victorian urban life. Gas lamps cast flickering lights on cobblestone streets as carriages clatter by, ferrying passengers to and fro. Street vendors hawk their wares, while beggars and urchins seek alms from passersby. In the more affluent neighbourhoods, elegant soirées and theatre performances are a respite from the city's gritty realities. In the poorer districts like Whitechapel, the air is thick with scent of poverty and desperation. Beneath the surface, whispers of fear and suspicion linger, fueled by recent string of brutal murders attributed to the now infamous Jack the Ripper.



EDWARD KEMPER
-American Serial Killer

Although serial killers can be traced back to even the 1st century AD, Jack the Ripper continues to captivate the public imagination, leading to countless theories, books, movies, and even tours dedicated to identify and uncovering the truth behind his identity. His legacy endures as a symbol of the dark side of humanity and the lingering fascination with unsolved mysteries.

Jack the Ripper is believed to have committed at least five murders, known as the "Canonical Five". The murders took place between August 31 and November 9, 1888, in the impoverished Whitechapel district of London. The victims were all women, primarily prostitutes, who were found with their throats slit and their bodies mutilated in a manner that suggested the serial killer had a degree of anatomical knowledge. The brutality of the murders shocked Victorian society and garnered extensive media attention, fuelling public fear and fascination.

Each murder bore similarities in terms of the victim's demographics (their age, gender, occupation, etc.) and the manner in which they were killed, leading investigators to believe that they were the work of the same perpetrator. However, despite extensive police efforts and public outcry, Jack the Ripper was never apprehended, and his identity remains one of the greatest unsolved mysteries in criminal history.

The precise motives behind Jack the Ripper's killings remain subject of speculation and debate among historians, criminologists, and amateur sleuths. Some theories suggest a deep-seated hatred or resentment towards women, pointing towards sexual sadism, while others propose motives related to medical experimentation or even royal conspiracy.

The infamous Scotland Yard, along with the London police, conducted a thorough and systematic examination of the crime scenes, interviewed, and detained thousands of suspects who fit the criminal profile. This was the first offender profile or criminal profile to exist in history. Mainly butchers, slaughterers, surgeons, and physicians were suspected because of the manner of the mutilation.

Although there is no evidence that the perpetrator engaged in sexual activity with any of the victims, psychologists believe that penetration of the victims with a knife and then leaving them on display in sexually degrading positions with the wounds exposed indicate that the suspect derived sexual pleasure from the attacks, a hypothesis which is still hugely debated.

In this article, we will see how psychology plays a crucial role in criminal profiling, its scientific approach, and accuracy, which has lead to the arrest of thousands of notorious serial killers. Additionally, I will shed light, in brief, on the nature versus nurture theory of serial killers, that is, whether you are born a serial killer or this society makes you become one.

The FBI, Federal Bureau of Investigation, was formed on July 26, 1908, as the Bureau of Investigation within the Department of Justice in the USA. It was established in response to the need for a federal investigative agency to combat growing concerns over interstate crime. Over time, its role expanded to include counter-intelligence, counter-terrorism, and cyber crime investigations, making it one of the primary law enforcement agencies in the world.

But the FBI was not always what it is right now. J. Edgar Hoover served as a director of the FBI and its modern architect from 1935 until his death in 1972. During his tenure, Hoover wielded significant power and influence, shaping the FBI into a powerful but controversial institution. Hoover's legacy is complex, characterised by both admiration for his accomplishments and criticism of his methods.

Most pertinently to this article, J. Edgar Hoover, was extremely skeptical of Psychiatry and Psychology for several reasons. Firstly, he believed that psychiatric evaluations were subjective and lacked the scientific rigor necessary for law enforcement purposes. Hoover also had concerns about the potential misuse of psychiatric labels to stigmatise individuals or justify their actions. Overall, Hoover's skepticism of Psychiatry stemmed from his emphasis on empirical evidence and his reluctance to adopt approaches that he viewed as unproven or unreliable.

Hoover's methods, although conventional, worked in most of the cases. But serial killers are anything but conventional. So, to get ahead of serial killers, we needed a very deep understanding of human behaviour and why they committed such crimes. Ultimately, it boils down to the central tenet that PSYCHOLOGY equals to WHY?

After the departure of Hoover, there was an overhaul in the FBI's internal structure and approach towards crime. Led by the free-thinking new Director of FBI, Clarence M. Kelly, in 1972, two agents, James Patrick Mullany and Howard Teten, formed the unit called the Behavioural Sciences Unit (BSU) in response to the rising wave of sexual assault and homicide during the early 1970s.

But the actual progress was made under special agents John E. Douglas, Robert Ressler and Dr Ann Burgess, members of the BSU. They began working to compile a centralised database of serial offenders. In fact, it was Robert Ressler who coined the term 'SERIAL-KILLER' for the first time and played a crucial role in psychological criminal profiling.

He was of the belief that many new perspectives can be gained by interviewing the already apprehended and incarcerated serial killers. Douglas and Ressler traveled to prisons across the United States in order to interview serial predators and obtain information about their motives, planning and preparation, details of the crime and disposal of evidence (like bodies and murder weapons). From 1976-1979, they interviewed around 36 incarcerated serial killers, which included Ted Bundy, Ed Kemper and Jeffrey Dahmer. They tried to find parallels between such criminal's backgrounds and motives. Their main intention was the identify a common pattern so that it can help identify the Modus Operandi of the perpetrator.

Modus Operandi (M.O) is used in criminal profiling, where it can help in finding clues to the offender's psychology. It largely consists of examining the actions used by the individuals to execute the crime, prevent detection, and facilitate escape. Suspects' M.O can assist in their identification, apprehension, or repression and can also be used to determine links between crimes.

Ressler was also instrumental in setting up the Vi-CAP: Violent Criminal Apprehension Program. This consists of a centralised computer database of information of unsolved homicides. This was primarily a response to the appearance of nomadic killers who committed crimes in different areas. Vi-CAP would help individual police forces determine if they were hunting for the same perpetrator so that they could share the information with one another, increasing their chances of identifying a suspect.

That theory behind psychological profiling is described as a method of suspect identification which seeks to identify a person's mental, emotional, and personality characteristics based on things done or left at the scene of crime. There are two major assumptions made when it comes to offender profiling: Behavioral Consistency and Homology. Behavioural consistency is the idea that an offender's crimes will tend to be similar to one another. Homology is the idea that similar crimes are committed by similar offenders, but this Homology idea is outdated right now.

There are three leading approaches in the area of offender profiling:

1. The Criminal Investigative Approach: used by the BSU (now BAU) within the FBI
2. The Clinical Practitioner Approach
3. The Scientific Approach

Now coming to the present Indian scenario, criminal profiling is very much useful to predict various crimes committed by the same offender. Although serial killing is not that much recognised in India as it is in the United States, still Indian investigative agencies like the CBI, CID, RAW use these methods to create a criminal profile, with the help of which even local police forces can apprehend a perpetrator, ranging from a sexual offender to even terrorists.

Lastly, the answer to the eternal question of Nature vs. Nurture theory of serial killing, that whether serial killers are born or they are a product of society. The answer is both though psycho-social factors play a major role. It is just like that two-hit hypothesis of cancer.

There might be a genetic predisposition but multiple other factors interplay in the outcome of a human being's personality. Chronic childhood neglect, severe childhood trauma, child sexual abuse, neglectful parenting, childhood bullying etc., all play a major role in shaping a person's psyche. Early signs of childhood misconduct like truancy from schools, fire-setting behaviour, gaining pleasure by torturing animals, some early-onset sexual perversions, easily irritable temperament, if left unchecked may very well imbue some antisocial personality traits in individuals while growing up. This, along with the company of friends and use of psycho-active substances like alcohol, tobacco, cannabis, etc, which are two very important social factors, lead to the inevitable outcome of Anti-Social Personality Disorder.

Finally, I would like to end this article on the hopeful note that serial killers are nothing but a product of the society and something that could have been prevented. As much as it is important to understand their psyche in order to identify and apprehend them, it is also a crucial part of their rehabilitation process during incarceration.

RECENT DEVELOPMENTS

A TRIUMPH OF DILIGENCE AND COMMITMENT

Dr. Ashima Chandran, a senior resident in the Department of Dermatology, Venereology, and Leprosy (DVL), will be honored with a gold medal at the 22nd convocation and award ceremony of the National Board of Examinations in Medical Sciences (NBEMS) in recognition of achieving the highest distinction in the DNBC examinations. The prestigious event is scheduled to take place on May 10, 2024, at Vigyan Bhawan in New Delhi, where she will receive the award from the esteemed President of India.

RANG BARSE



Festivals are like the spice that add flavour to our monotonous life. While being on campus, there's a twinge of nostalgia for the familiar traditions and warmth of home; there's also excitement in creating new memories with college friends. KMC's celebration of Rang Barse during Holi 2024 was a testament to this. The vibrant colours, playful water fights, and high-energy dance infused the air with exuberance and joy.

POST CONVOCATION-THE DIAMOND JUBILEE BATCH EMBARKS ON A NEW JOURNEY

We witnessed the commemorative convocation of Zenolentz, the batch of 2018, on April 5th, 2024. From their entry into the college as a diamond jubilee batch, to the spectacular Uthkarsha 2022, and finally their graduation day, Zenolentz has held a special place in the heart of KMC. We extend our heartfelt congratulations and best wishes for the embarkment of their new journey. They have truly demonstrated themselves as the guardians of "Enhancing Medicine with Excelling Expertise."



DR KAVAMPALLY-PULSE OF MANAKONDUR



From diagnosing to law making, Dr. Kavampally Satyanarayan, an esteemed alumnus of Kakatiya Medical College, Hanumakonda, has recently been elected as an MLA from the Manakondur constituency, Karimnagar, Telangana. Graduating in the batch of 1984, he furthered his academic journey by completing his post-graduation in general surgery at KMC in the batch of 1995. Following this, he served diligently as an associate professor at Osmania Medical College. Renowned for his compassionate nature, particularly towards the less fortunate, Dr. Satyanarayan has selflessly performed numerous surgeries free of charge at his medical institution in Hyderabad. In 2009, driven by his unwavering commitment to serving the community, he made the pivotal decision to join the Congress party under the leadership of the then Chief Minister, Y.S. Rajashekhar Reddy, dedicating himself wholeheartedly to the welfare of the marginalized sections of society. Notably, Dr. Satyanarayan has been actively involved in various facets of alumni engagement, playing a significant role in the Diamond Jubilee celebrations at KMC in 2018. Additionally, he has been instrumental in spearheading developmental initiatives and providing invaluable guidance alongside the NRI alumni.

KMC SCHOLARS SWEEP PRESTIGIOUS COLLEGE COMPETITIONS



G.Javali and V.Sai Sarath, 2nd MBBS students, bagged second position in a case presentation at AFMC ILLUMINATI. Their winning topic was 'pregnancy but not pregnancy: case of hyaditiform mole.' Rishta Erukulla, a 2nd Year MBBS student also won a third prize in STEM talk competition. Another 2ND MBBS student Aditya Reddy secured first position for his model on the gustatory pathway at CEREBRATION: the annual fest of Aiims Mangalagiri. Bhargav Gupta, a 2nd year MBBS student secured 5th position in overall telangana state in speakathon conducted in T Hub on the topic "INDIA the country of many diversities."

KMC TO TSMC

Leadership is a skill that is not innate to everyone. College life offers an opportunity to enhance your leadership abilities. Living testaments to this theory are the proud alumni of KMC who started their journey as members of the esteemed JUDA and are now integral pillars of TELANGANA STATE MEDICAL COUNCIL. Among them, Dr. Yeggana Srinivas (1999 batch), Dr. Prathiba (2001 batch), and Dr. Srinivas G (2003 batch) shine as exemplars of this transformative evolution.

BABY UTHKARSHA

Dr. Bharath, MBBS, MS Ortho from the batch of 2008, and Dr. Mounika, a proud alumna from the batch of 2011, displayed a profound affection for their alma mater, KMC, in a truly unique manner. Their daughter, born on July 25th, 2022, was lovingly named 'Uthkarsha,' a heartfelt tribute to the institution that played a pivotal role in shaping their lives. This heartwarming gesture left the entire KMC community in awe. Dr. Bharath expressed gratitude, acknowledging KMC not only as the source of his livelihood as a prominent orthopedician but also as the place where he found a supportive life partner.

FROM THE EDITOR'S DESK

Dear Reader,

I want to extend my sincerest thanks to our esteemed Principal, Dr. Mohandas, for his endless support and the dedicated editorial team for their relentless efforts in editing the third edition of Kakatiya Chronicles. Your unwavering commitment to excellence is truly commendable. We hope our publication meets your expectations.

Additionally, I am grateful to our faculty, seniors, and juniors for their active participation and overwhelming contribution. Your insights have undoubtedly elevated the quality of our publication, making it truly outstanding.

Kakatiya Chronicles has evolved into a platform for sharing knowledge and experiences, and this achievement would not have been possible without the collective efforts of everyone involved. Thank you for entrusting us with this opportunity to contribute.

Sincerely
Aarush Thakur
Editor-in-Chief
Kakatiya Chronicles

THE TEAM

Editor in Chief: Aarush Thakur
Managing Editor: Rashi Agarwal

SENIOR EDITORS:

- Saniya Banu
- Anika Goel
- Srinidhi Mudireddy
- Sai Varun

Social Media Executive: Furquan Mohiuddin

JUNIOR EDITORS:

- V. Sai Sarath
- Bhargav Guptha
- Pooja Mehra
- Vishnu Pappu
- Mukka Archisri