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THE OFFICIAL NEWSLETTER OF KARNATAKA CHAPTER - IAPM



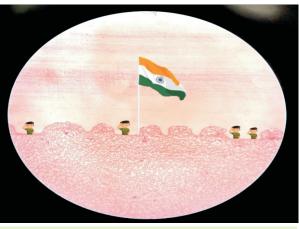
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Best of LensArt PATHOLOGY - PAST PRESENT & FUTURE

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NOTE FROM THE EDITORIAL TEAM

The KCIAPM newsletter team is back to unfurl the 2nd issue of 'Path Varna' for the year 2023, as we are looking forward to the much awaited KAPCON 2023 being hosted in largest coastal city of Karnataka also known as 'Rome of the East'-Mangaluru by Father Muller's Medical College. Our cover page this time portrays the best of lens art intricately captured in the pathologists' lens - microscopic views routinely seen but with an artistic twist ! Content also includes prose and poetry, articles, announcements, interview of a renowned pathologist, National Handloom Day Celebrations, and a very innovative think tank section that will surely stir your minds. We also keep you connected with what's over and what's to look forward to in the KCIAPM path community.

We thank all the contributors for sharing their work and our office bearers for their support in drafting this newsletter. Do take some time off not only to savour the flavours of this issue but also to actively submit articles for the upcoming issues and get your names inked in 'Pathvarna' - The Official Newsletter of KCIAPM

Editorial Committee - Pathವರ್ಣ



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President's Message



Dr Suresh Hanagavadi President, KCIAPM Professor, Department of Pathology, JJM Medical College, Davangere

Dear PathVarna readers,

I am honored to address you as the President of the KCIAPM (Karnataka Chapter of the Indian Association of Pathologists and Microbiologists). Our organization has always been dedicated to the advancement of pathology and microbiology in the medical field, and it is with great enthusiasm that I share this message with you.

Pathology and microbiology play a pivotal role in the diagnosis, treatment, and prevention of diseases. In an era of rapid medical advancements, it is essential for us, as professionals, to stay updated with the latest developments, techniques, and research in our field. KCIAPM is committed to providing a platform for knowledge exchange, professional growth, and networking opportunities for pathologists and microbiologists across Karnataka.

Our members are at the forefront of healthcare, working diligently in laboratories, hospitals, and research institutions. Together, we strive to enhance the quality of patient care through accurate diagnoses and innovative research. We encourage our members to collaborate, share their expertise, and contribute to the everexpanding landscape of medical knowledge.

In the coming months, KCIAPM will host a series of educational events, conferences, and workshops designed to empower our members with the latest skills and information. We invite you all to participate actively in these activities and make the most of your KCIAPM membership.

Furthermore, we recognize the importance of community outreach and public awareness. KCIAPM is committed to engaging with the community, educating the public about the significance of pathology and microbiology in healthcare, and promoting health literacy. I extend my heartfelt gratitude to the dedicated members of KCIAPM who work tirelessly to make our organization a hub of excellence in our field. Together, we will continue to uphold the highest standards of professionalism and contribute to the betterment of healthcare in Karnataka.

I sincerely thank the editorial board of our official newsletter, PathVarna for their dedication leading to yet another amazing edition of PathVarna.

I also welcome all delegates to our 49th State Annual Conference, KAPCON 2023 and congratulate the organizing committee for the wonderful arrangements.

Thank you for your continued support, and I look forward to a year filled with growth, learning, and achievements in the field of pathology and microbiology.

Sincerely,

Dr Suresh Hanagavadi

President, KCIAPM P rofessor, Department of Pathology, JJM Medical College, Davangere

Secretary Message



Dr Aditya Agnihotri, Secretary, KCIAPM (Karnataka Chapter of the Indian Association of Pathologists and Microbiologists)

Dear PathVarna Readers and KCIAPM Members,

I hope this message finds you in good health and high spirits. As the Secretary of Karnataka Chapter of the Indian Association of Pathologists and Microbiologists (KCIAPM), it gives me great pleasure to extend my warmest greetings to all our esteemed readers and members and announce the release of Volume 2 Issue 2 of of PathVarna Magazine, the official newsletter of the KCIAPM.

PathVarna Magazine has been a steadfast companion on our journey of exploration and discovery in the realms of pathology and microbiology. It serves as a bridge that connects us, disseminating knowledge, sharing insights, and highlighting the remarkable work of our members and contributors.

Our aim with PathVarna has always been to create a platform where we can celebrate the accomplishments, innovations, and expertise within our community. It's a testament to the dedication and brilliance of our members that each issue of PathVarna continues to inspire and educate.

I want to express my gratitude to our dedicated team of writers, editors, and contributors who invest their time and expertise in curating thought-provoking content for each edition. Your contributions are the lifeblood of this publication, and without you, we would not be able to deliver this valuable resource to our members.

To our readers, I encourage you to actively engage with the content, provide feedback, and consider contributing your own insights and experiences to further enrich PathVarna. Your participation is essential in making this publication a vibrant and dynamic platform for knowledge exchange.

In the upcoming issues, we are excited to bring you even more compelling articles, research highlights, and news from the world of pathology and microbiology. PathVarna will continue to be a source of inspiration, learning, and connection within our community.

As we move forward, I invite you to share your ideas, suggestions, and feedback with us. Your input is invaluable in shaping the future of PathVarna and ensuring that it remains a valuable resource for all our members.

Thank you for your continued support and engagement with PathVarna Magazine. Together, we will continue to advance the frontiers of pathology and microbiology.

It is with immense pleasure and enthusiasm that we welcome you to the prestigious KAPCON 2023 - our 49th annual state conference at Father Muller Medical College, Mangalore, dedicated to advancing the fields of pathology and microbiology.

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Dr Aditya Agnihotri, Honorary Secretary, KCIAPM Additional Associate Professor, SDM College of Medical Sciences and Hospital, Shri Dharmasthala Manjunatheshwara University Dharwad

Treasurer's Message



Dr Thejasvi Krishnamurthy Honorary Treasurer, KCIAPM Professor Department of Pathology Kempegowda Institute of Medical Sciences, Bengaluru

Dear Pathvarna readers and Esteemed KCIAPM members

I am delighted to extend my warmest greetings to all of you through the pages of our volume 2 issue 2 of the Pathvarna magazine. It is with great pleasure that I commend our dedicated editors and contributors for their unwavering commitment to providing insightful content to our readers.

Karnataka Chapter of the Indian Association of Pathologists has been actively engaged in advancing our mission to promote excellence in the field of pathology. Our association has tirelessly worked to foster collaboration, knowledge sharing, and continuous learning among our members.

In this issue, you will find a reflection of our association's activities, events, and accomplishments. From educational initiatives and various scientific sessions, our members have exemplified the spirit of service to the field of pathology, that defines our organization.

I would like to express my gratitude to our editors, whose meticulous work has transformed the pages of this magazine into a valuable resource for our community. Your dedication to upholding the highest standards of quality and relevance is truly commendable.

As we continue to navigate the evolving landscape of pathology, I encourage all members to actively participate and contribute to our association's endeavors. Together, we can further strengthen our community and continue to make significant contributions to the field of pathology.

Thank you for your continued support and engagement. I look forward to seeing our association flourish in the coming months.

Warm regards,

Dr Thejasvi Krishnamurthy

Honorary Treasurer, KCIAPM Professor Department of Pathology Kempegowda Institute of Medical Sciences Bengaluru

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PROSE AND POETRY - ENGLISH

ALL ABOUT HEALTH PACKAGES

Must know facts.....

Dr. Shubha. H.V Consultant Pathologist, TrueMedix Lifescience Pvt Ltd Labs, Sahakarnagar, Bengaluru



1. What is the purpose of designing the health packages in laboratories and diagnostics?

In today's fast-paced and instant world, people are becoming more susceptible to a spectrum of new disorders. The swift transformation in lifestyle has undoubtedly led to a tremendous increase in various acute and chronic illnesses. As all of us are aware of the famous old proverb "Health is wealth", health is indeed the most indispensable part of everyone's life. Upholding this famous proverb, many laboratories and diagnostics have designed several cost-effective and flexible health check package services based on gender (men and women), age groups (newborn, pediatric, adolescent, adults, senior citizens), and diseases (acute/ chronic, infectious/metabolic/hematologic/ endocrinologic/ genetic/ hepatic/cardiac/ renal etc.)

2. What are the aims and objectives of these health packages?

The main aim of most of the health packages is "Health For All" at affordable cost.

The objectives are :

- Increasing awareness among the valued customers towards various diseases.
- Encouraging people to take a step towards leading a happier, healthier and longer life.
- Motivating people to follow "Prevention is always better than cure".

3. What are the factors to be considered while selecting the health packages?

The following factors are to be considered:

- Based on one's requirements: Different packages are available based on the age, gender and the prevailing health conditions. For example, separate health packages exist for men, women, newborn, senior citizens and for people with specific diseases (like diabetes, arthritis, heart related problems etc).
- Cost-effectiveness and affordability: Several types of tests are done under a single panel which costs lesser than a collection of different tests chosen separately. Do not just focus on low-priced packages, instead ensure that the laboratory is furnishing

the tests at nominal prices. Compare the prices and look out for good offers before selecting the packages and panels. Also look out for discounts on special occasions.

- Look out for the Provision of Free Home sample collection facilities
- Availability of online reports
- Availability of online consultation with a doctor
- Comprehensive and accurate reports: Look out for an NABL accredited, wellequipped lab using modern technology and infrastructure where the reports are reviewed by well-trained and experienced doctors (pathologists/biochemists/ microbiologists etc.) and the labs with good reviews by the valued customers.
- Good customer care services

4. What are the benefits of getting a regular health checkup done?

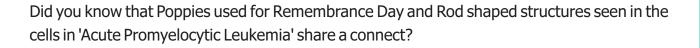
Regular health checkups are beneficial to the customers in multiple ways:

- To detect potentially life-threatening diseases at an early stage: We live in a "twilight zone", where we continue living with our chaotic, routine, busier lives until we meet with an unpleasant surprise. Even though a person looks fit and fine physically, he/she might be having an underlying serious illness which would have not manifested symptomatically in the initial stages. Therefore, it is recommended that irrespective of one's age and health status, even if a person is leading a good and happy healthy life, he/she should get regular health check-up done atleast once in a year. Many critical diseases can be prevented if detected early.
- Our health check-ups are designed not just for detecting the underlying medical disorders but also to identify the risk factors before they completely blow up to cause any serious problems.
- To keep a track of the comprehensive health status: Health checkups help one to keep a track of the continuous changes happening within body and thereby, modify their lifestyle accordingly. It also helps the doctors to monitor their patient's medications and dosages from time to time.
- To help in diagnosis and management of specific diseases: Specialized health packages help to diagnose particular disease conditions thereby, helping the clinicians in choosing appropriate treatment and management protocols
- To increase the success of treatment: Early detection and close monitoring of the risk factors especially for chronic disorders through medication and lifestyle changes enhances the overall health and in turn increases the success of treatment
- To lower the medical expenses: A regular health checkup helps to save money in long term as it detects a disease in its early stage and therefore, avoids surgery or other costlier treatment plans.

WHATS IN A NAME? A HISTORICAL INJUSTICE

Squadron Leader (Dr) Abhishek Singh

Assistant Professor, Dept of Pathology Command Hospital Air Force, Bangalore





It all begins with the Canadian Physician Lt Col John McCrae. John McCrae was a poet and physician from Guelph, Ontario, Canada. He developed an interest in poetry at a young age and wrote throughout his life.



At the age of 41, McCrae enrolled with the Canadian Expeditionary Force following the outbreak of the First World War. He had the option of joining the medical corps because of his training and age but he volunteered instead to join a fighting unit as a gunner and medical officer.

McCrae fought in the Second Battle of Ypres in the Flanders region of Belgium, where the German army launched one of the first chemical attacks in the history of war. They attacked French positions north of the Canadians with chlorine gas on April 22, 1915

but were unable to break through the Canadian line, which held for over two weeks.

Lt Alexis Helmer, a close friend, was killed during the battle on May 2. McCrae performed the burial service himself, where he noticed how poppies quickly grew around the graves of those who died at Ypres. The next day, on 3rd May, he wrote the poem, 'In Flanders Fields' while sitting in the back of an ambulance at an Advanced Dressing Station outside Ypres. This place has since become known as the John McCrae Memorial Site.

In Flanders Fields John McCrae

In Flanders fields the poppies blow Between the crosses, row on row, That mark our place; and in the sky The larks, still bravely singing, fly Scarce heard amid the guns below.

We are the Dead. Short days ago We lived, felt dawn, saw sunset glow, Loved and were loved, and now we lie In Flanders fields.

Take up our quarrel with the foe: To you from failing hands we throw The torch; be yours to hold it high. If ye break faith with us who die We shall not sleep, though poppies grow In Flanders fields.



According to legend, fellow soldiers retrieved the poem after McCrae, initially dissatisfied with his work, discarded it.

"In Flanders Fields" was first published on December 8 of that year in the London magazine 'Punch'. The poem is one of the most quoted poems from the war. As a result of its immediate popularity, parts of the poem were used in efforts and appeals to recruit soldiers and raise money selling war bonds.

Coming back to Lt Col John McCrae ! John McCrae had a brother Thomas McCrae who was also a physician and was an assistant to the great William Osler at the Johns Hopkins Hospital.

McCrae's association with Osler continued with their

collaboration in The Principles and Practice of Medicine, an authoritative medical text at the time. McCrae was initially assistant editor, but later became the editor of this text upon Osler's death.

In 1905, Thomas McCrae published a paper where he observed that a certain patient admitted under William Osler at Johns Hopkins had cytoplasmic inclusions in his blood cells in the form of 'rod shaped crystalline structures'.

The exact same findings were published By John Auer in 1906 in a paper where he acknowledged that his findings were first described by Thomas McCrae a year earlier. They both thought that the patient suffered with Acute Lymphoblastic Leukemia.

However , as we all know today these peculiar rod like structures are seen in Acute Myeloid Leukemia- most strikingly seen in Acute Promyelocytic Leukemia. These inclusions became popular as 'Auer Rods' despite first being described by Thomas McCrae!



It is ironic that John Auer got the diagnosis wrong and used all of Thomas McCrae's findings but still the world recognises the inclusions as 'Auer's Rods'!

The Great Dr Barbara Bain even wrote a paper asking for the nomenclature to be changed to 'McCrae-Auer rods' to recognise McCrae's contributions.

So next time when you see your favourite celebrity wearing a poppy lapel pin, remember the fallen heroes of WW1 and also John McCrae and his brother Thomas McCrae who gave the world 'McCrae's Rods'!

Fun and facts of Genomics in Cancer

Dr. Amrit Kaur Kaler

Consultant – Molecular Pathology and Genomics Department of Laboratory Medicine Kokilaben Dhirubhai Ambani Hospitals, Mumbai



Fun: Humans have created a lot of codes, from binary codes that dictate the world's most powerful codes to a number of logical codes, but we often forget the most important code, the one that dictates our lives, the human genetic code! More people want to unlock their DNA secrets by subjecting to whole genome sequencing, also commonly humoured as "Genomepatri". Unfortunately, without proper genetic counselling and understanding of the variants makes one prone to personal, familial and ethical implications rather



taking informed decisions and utilizing the information effectively in their favour!



"Here's my DNA sequence."

Let's talk about Fact now: Precision oncology based on these alterations in genetic code has positioned itself at the forefront of cancer treatment based on next-generation sequencing (NGS) tests for cancer biomarkers such as comprehensive genomic profiling tests, which allow Molecular Pathologists and Oncologists to look at the genomic profile and potential targets that controls the growth of cancer cells. Of a patient's cancer and recommend appropriate treatment like targeted therapy, Immunotherapy or chemotherapy. Ultimately, it's about choosing the right treatment for the right patient at the right time! Lung cancer has been the poster child of precision oncology, with complete lay of the targeted therapy as a first line therapies based on molecular markers like EGFR,

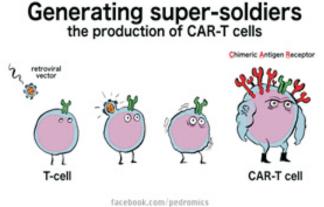
ROS1, ALK, MET, RET, NTRK, KRAS, BRAF, ERBB2, ERG. Recently, tumor agnostic markers therapy has been used as a predictive and diagnostic tool. Sequencing and analysis of certain genes like TMB, PDL-1 AND MSI determine the type of immunotherapy to be given and its efficacy.

Liquid biopsy in cancer genomics revolutionizes diagnostics by enabling non-invasive detection of tumor-derived DNA in body fluids, offering a promising avenue for early cancer detection and personalized treatment strategies. This promising approach holds great potential to revolutionize cancer care and improve patient outcomes. Hereditary cancer refers to the type of cancer that is caused by inherited genetic mutations from one or both parents. These genetic mutations increase the risk of developing specific types of cancer within a family lineage. Genetic counselling and testing play a crucial role in identifying individuals at higher

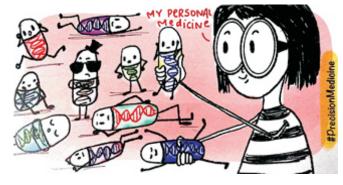
risk, enabling early detection and preventive measures.

The two types of targeted therapies have been formulated in solid tumors that include monoclonal antibodies and small molecule drugs. There have been many developments in the field of targeted therapies for blood cancers, such as bispecific T cell engages, antibody-drug conjugates, recombinant immunotoxins, and, finally, Chimeric Antigen Receptor T (CAR-T) cells. These new targeted therapies have improved the clinical outcome of blood cancer patients.

Vaccines have been developed to prevent certain types of cancers, mainly the cancers that are caused due to viral infections like Human papilloma virus (HPV) and Hepatitis B virus (remove). Certain cancer vaccines boost the immune system to fight against the already established cancer. Examples of such vaccines include, Talimogene laherparepvec (T-VEC) and Sipuleucel-T (Provenge). One of the major advances in the treatment of



cancers, involves Vaccines have been developed to prevent certain types of cancers, mainly the cancers that are caused due to viral infections like Human papilloma virus (HPV) and Hepatitis B virus (remove). Certain cancer vaccines boost the immune system to fight against the already established cancer. Examples of such vaccines include, Talimogene laherparepvec (T-VEC) and Sipuleucel-T (Provenge). One of the major advances in the treatment of cancers, involves chimeric antigen receptor T cell therapy (CAR-T) cell therapy. It involves in vitro modification of patients T cells to fight off the cancer cells.



Conclusion: The ease of DNA sequencing and increasing awareness has led to a lot of new business endeavours which provide DNA sequencing services or DIY kits that help understand ones own specific genes and disorders which may be associated with them. Although it is very important to understand that genetic testing is not the panacea of life and

proper genetic counselling is essential before an individual decides to go for genetic testing.

Preventive health check-up is not what Indians want to invest right now. In order to gain a better understanding of cancer and to develop more personalized treatment options, we must overcome the narrow, single institution mentality as a community in order to build sufficient critical mass and build new interventions to relieve suffering and save lives.

WHAT CAME FIRST : EGG OR CHICKEN?

Dr Anita P Javalgi

Professor SDM College of Medical Sciences and Hospital, SDM University Dharwad, karnataka



One always wonders what came first: Egg or the Chicken?

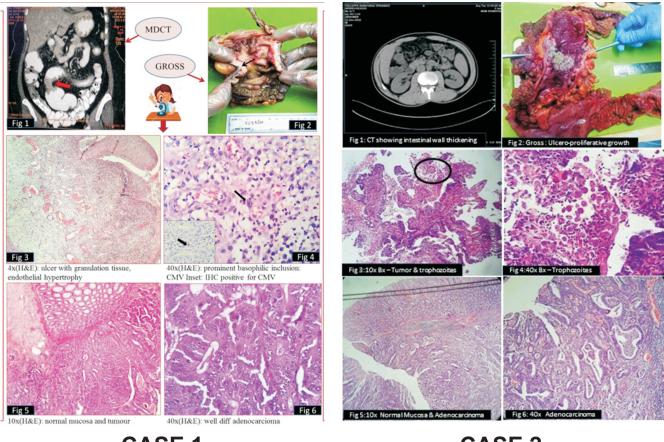
We pathologists also face a scenario in our day work where we encounter a dual lesion in same tissue and a true pathologist wonder and try to get into the complexity of the lesion ie pathogenesis of the lesion and in such dual lesion always I get a thought which pathogenetic agent came first.

EGG OR CHICKEN

Here I discuss the cases which I encountered in my day of practice. I do come across dual lesion in various tissue as any pathologist does, but as I am inclined towards gastrointestinal pathology, I bring 2 different cases with dual lesion in two different patients.

C ase 1: Female patient aged 57yr presented with pain in lower abdomen, insidious in onset and gradually progressive. On investigations hematological, serological and biochemical analysis was within normal limits. Ultra sonography revealed large intestine dilated and fluid filled with multiple air fluid levels indicating bowel obstruction. MDCT showed circumferential wall thickening involving the descending colon and distal half of transverse colon. Case was subjected to emergency laparotomy. Resected segment was sent for histopathological evaluation. Grossly segment of sigmoid colon showed ulcero-proliferative growth. Microscopy revealed colon adenocarcinoma with CMV infection. **Pathological diagnosis of this case was rendered as well differentiated adenocarcinoma(pT2NOMx) with CMV infection**

Case 2: 32yrs male complaints of pain abdomen and altered bowel habits. Radiological investigations revealed heterogeneously enhancing circumferential wall thickening at hepatic flexure of colon of 80mm length and 14mm thickness causing narrowing. Colonoscopic biopsy done and reported as **well differentiated adenocarcinoma with amebic colitis.** Following this hemicolectomy was done and patient put on chemotherapy. Hemicolectomy confirmed the findings and signed out as moderately differentiated adenocarcinoma. **Pathologic Stage Classification: pT4a, N2b, M1c. Prognostic Stage Classification: Stage IVC.**



CASE 1

CASE 2

PATHOGENESIS

Scenario 1: The possible contribution of CMV in the development and progression of colorectal cancer is still controversial. CMV infection is life long and it manifests differently depending on the patient's underlying condition and immunological status. The possible association of CMV with human colorectal adenocarcinomas was reported first in 1978 by Huang and Roche, who detected CMV DNA in 4 of 7 colonic adenocarcinomas by membrane complementary RNA-DNA hybridization.

Scenario 2: Colonic amebiasis can mimic colon carcinoma clinically, radiologically and endoscopically. Conversely, amebiasis and coexisting carcinoma are exceedingly rare. In two African studies, colorectal carcinoma was found to be associated with intestinal amebiasis in 6.1% and 6.5% of cases. Furthermore, five cases of cervical, perineal, sigmoid and pulmonary carcinomas colonized by E. histolytica have been described in three case reports. A single case study dated from 1963 reported adenocarcinoma with amebiasis.

Experiences and lessons

Dilemma : Did this infection cause altered immunity and impaired repair mechanism during inflammation leading to carcinogenesis OR cancer caused altered immunity and thus making one susceptible for acquiring infection.

What came first? Always a thought: that's why I said egg or chicken what came first

- Pathologist should have an Eagle eye to see through the slide, identify the lesion/lesions, not to be elite by finding incomplete information and rather look through and through and reconfirm as is it a lesion or lesions.
- As there is a saying True doctor cure the disease not symptoms similarly true pathologist identifies the pathogenesis and diagnose the case accordingly.
- It is necessary to revisit this important subject of infection and carcinoma coexistence because it might have a great impact on cancer prevention and treatment and on our understanding of tumorigenesis.
- Gastroenterologists and pathologists should be aware of this possibility and carefully evaluate patients with co-existence of lesions.

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My Memoir Of Balancing Quality and Quantity of Workflow In Hematology Laboratory from just another day to getting accredited – Challenging not Impossble !

Dr. Nikhil P V

Assistant Professor, Dept of Pathology Dr.Chandramma Dayananda Sagar Institute of medical Education & Research, DSU Ramanagara



Though my dream was to become a General Physician from the very first day of MBBS, destiny brought me up and close to the wonderful world of Pathology. From the joining day pathology, what fascinated me most was the hues of Hematology.

Having a designated post of an Assistant Professor in the Department of things were all smooth with juggling between routine laboratory work and academics. Tables turned around when readiness for accreditation was announced !Getting a Hematology lab accredited by NABL, though a dream for any Pathologist, is a nightmare for many like me too!. That too getting accreditation of a new medical college just a couple of years old is an uphill task. However, as quality was always a part of the foundational workflow, we were always ready with basic quality data and assurance Programmes. (IQ & EQAS) Though I was aware of quality team activities, clouds fell down when one fine day I was called and given the responsibility of "Section In-charge" for Hematology. Completely taken aback as I was still a new bee in this particular field. Though I was certified with internal audit and QMS for 4 day NABL course, the practical knowledge was minimal. The time frame given was just 3 months. Understanding what is NABI and how it works took almost a month for each one of us. The time remaining was very less, and the groundwork, challenges, and stress were Herculein. Technical and other supportive staffs were also inexperienced and were not trained to handle any NABL related work. I Had to work with equipment calibration, reagent supply & logistics, IQC & EAQS Programs, IT support team and documentation etc, all at a time. A lot of time was spent on preparing a manimum of 50 log sheets, 25 different registers and files, 30 SOPs, and 20 work desk instructions. Training sessions were organized for technicians and other supporting staffs regarding self-care, sample transportation, and handling, acceptance and rejection criteria, critical alerts, equipment maintenance, IQC and EAQS and of course documentation. This was most difficult and time consuming as technical staffs are pillars of any laboratory. I was sure that if I could train them properly, the road for the accreditation process would be easy. There were many days where I was extending my working hours till 9 PM in the night not to mention many sleepless nights thinking about undone works. The challenges I faced to maintain routine lab work, academic work, and upon that NABL Related work in a medical college without postgraduates - short of words to explain.

Finally, on the day of the Audit, I presented my best. The audit went on for 2 complete days. Questions were raised and documentation was shown. Be it hard work or God's grace, the auditors were pretty impressed with the way I prepared for the first audit. At least 90% of the things were in the right way. Yes, we got a few nonconformities which we were able to close. By the end of the audit there was a sigh of relief for everyone, there were happy faces and cheers all over because it was pure hard work and yes a teamwork.

On this day our Hematology lab is accredited by NABL, a milestone which we dreamt of. However, the real tasks started from there so as to maintain whatever we have started. With this what we understood was NABL accreditation is not just documentation and 2 days audit, but a continuous maintenance process so as to provide reliable and quality reports to the patients. Present position as a "Section In-Charge" for Hematology is like a "Blessing in Disguise" as it has boosted my overall confidence level to work in any Hematology lab right from scratch and has brought out the best in me! As they rightly say – whatever happens happens for good !

Acknowledgment: I dedicate this article to all my senior staffs who guided me through this, my colleagues who helped me, my family members, and last but not least my beloved technicians who worked with me as a team in achieving this milestone.



The Blood Runs Thin

Shalini Radhakrishnan

Post graduate student, Dept of Pathology Kasturba Medical College , Manipal



From this diseased reality To be an ordinary soul Unburdened by relentless torment

But my body betrays me A battleground of cells in revolt Each day a new battle In this war waged against myself

And as the clock ticks onward I become a prisoner to time Each passing moment a reminder Of the fragility of mortality

The fear, a constant companion Breathing down my neck Its icy fingers gripping my soul As the world carries on, oblivious

But in the depths of this affliction I find fragments of strength A flicker of resilience Amidst the darkness of my disease

So I will endure I will fight, fiercely And when the path grows bleaker still I will find solace in the beauty of the struggle

For in the depths of despair There lies a hidden strength A resilience born of pain That defies the grasp of cancer's grip.



A day in Hematology lab



Dr. Sushma Belurkar Professor, Department of Pathology, Kasturba Medical College, Manipal

Samples pouring in, all round the clock Purple, blue, green capped and more in the stock. The CBC analysers are on their toes sucking and counting, And the slides are all decked up for the final step of mounting. The urine analyser is loaded with urine strips afresh, The coagulation machine is trying to peep through the clot mesh. Fluids have got lined up to be scrutinised for their content, Neutrophils or lymphocytes is the report to be sent? The ESR machine is eagerly waiting to get some attention As it knows the sample will reach it, only after everything else is done. The flow cytometer is resting happily in its dark cool chamber Before the CD4 count samples awaken it from its deep slumber. The technicians are engaged, yet have their eyes on the clock Waiting for their shift to end and their relievers to hold the dock. Such is a busy day in our Hematology laboratory Where working is the rule and learning is complementary!

PROSE AND POETRY – KANNADA

ಅಮೃತಧಾರೆ

ಡಾ. ಅನಿರುದ್ಧ ವಸಂತ ಕುಷ್ಟಗಿ ಪ್ರಾಧ್ಯಾಪಕರು ಹಾಗೂ ಮುಖ್ಯಸ್ಥರು ರೋಗ ನಿದಾನ ಶಾಸ್ತ್ರ ವಿಭಾಗ ಕೊಪ್ಪಳ ವೈದ್ಯಕೀಯ ವಿಜ್ಞಾನಗಳ ಸಂಸ್ಥೆ ಕೊಪಳ – 583231.

ಪೂತನಿಯು ಹರಿಸಿದ್ದೂ ವಿಷವಾಗಲಿಲ್ಲ ಸೃಷ್ಟಿಯಲಿ ಸರಿಸಾಟಿ ಎದೆಹಾಲಿಗಿಲ್ಲ ಸಮುದ್ರ ಮಂಥನವಿಂದಿಲ್ಲಿ ಮಾಡಬೇಕೆಂದೇನಿಲ್ಲ ಮಾತೃ ವಾತ್ಸಲ್ಯವಿದ್ದರಿಲ್ಲಿ ಸಾಕಲ್ಲ!

> ಆಕಾಶದಗಲ ಕ್ಷಿತಿಜವೆಲ್ಲಿ ಎದೆಯಲ್ಲಿ ಸಮುದ್ರದಾಳ ತಾಯಿ ಹೃದಯದಲ್ಲಿ ಹರಿಸುವಳು ಸಂಜೀವಿನಿ ಬಾಯಲ್ಲಿ ಅಮೃತ ಧಾರೆಯಿದು ಕಂದಮ್ಮಗಳಿಗಿಲ್ಲಿ

ಕಡ್ಡಾಯವೀಧಾರೆ ಹುಟ್ಟಿನಿಂದಾರು ತಿಂಗಳಿಗೆ ರೋಗನಿರೋಧಕವಿದು ನಗುತಿರುವ ಮಗುವಿಗೆ ಅಮ್ಮನಾರೋಗ್ಯವನು ವೃದ್ಧಿಸಲೂ ಯೋಗ್ಯವಿದು ತಾಯಂದಿರಿಗಿಲ್ಲಿ ಸಹಕರಿಸಲು ವಿಶ್ವದೇಳಿಗೆಯಾಗುವುದು

ಬೆಆಕಿನ ವೇದಿಕೆಯಲ್ಲ ಗಾಜನ ಇಣುಕು ನೋಟ

Dr. Naveen Kumar D S Postgraduate Student Mysore Medical College and Research Institute Mysuru



'ವರ್ಣಮಯ ಚಿತ್ತಾರ – ಪೆಥಾಲಜಿ ವಿಸ್ತಾರ'

ಬೆಳಕಿನ ವೇದಿಕೆಯಲ್ಲಿ ಗಾಜಿನ ಇಣುಕು ನೋಟ ಗಾಜಿನ ಮೈಮೇಲೆ ಬಣ್ಣಗಳ ರಂಗಿನ ಆಟ ಹಲವು ಬಣ್ಣಗಳ ನಡುವೆ ನಮ್ಮ ಪೆಥಾಲಜಿಯ ಪಾಠ

ಸದಾ ಜೀವಕೋಶಗಳೊಂದಿಗೆ ನಮ್ಮ ಒಡನಾಟ, ಅವುಗಳಲ್ಲಾಗುವ ಬದಲಾವಣೆಗಾಗಿ ನಮ್ಮ ಹುಡುಕಾಟ ರೋಗಿಯ ನೋಡದೆ ರೋಗಲಕ್ಷಣ ಹೇಳುವ ವೈದ್ಯರ ವೈದ್ಯರ ನಾವು ರೋಗಿಯ ಒಳತಿಗಾಗಿಯೇ ನಮ್ಮಯ ಹೋರಾಟ

ಡಾ. ನವೀ....!!

ಪ್ರವಾಸ ಕಥನ

ಡಾ॥ ಕೌಸ್ತುಭ ಅರುಣ್ ಶಿವಮೊಗ್ಗ ಡಯಾಗ್ನೋಸ್ಟಿಕ್ ಸೆಂಟರ್ ಶಿವಮೊಗ್ಗ



ಲೇಪಾಕ್ಷಿ – ತಡಿಪತ್ರಿ – ಗಂಡಿಕೂಟ – ಬೆಲ್ಲಂಗುಹೆಗಳು

ಆತ್ಮೀಯ ಸ್ನೇಹಿತೆಯರನ್ನು ನೋಡಿ ಬಹಳ ತಿಂಗಳುಗಳಾಗಿದ್ದವು, ಚರವಾಣಿಯಲ್ಲಿ ಮಾತನಾಡುವುದು ಸಾಕಾಗುತ್ತಿರಲಿಲ್ಲ; ಆಂಧ್ರಪ್ರದೇಶದ ಗಂಡಿಕೂಟ ಮತ್ತು ಬೆಲ್ಲಂ ಗುಹೆಗಳನ್ನು ನೋಡಬೇಕೆಂಬುದು ಬಹುದಿನ ಆಸೆ; ಈ ಮೇಲಿನ ನೆಪಗಳನ್ನು ಇಟ್ಟುಕೊಂಡು ರೂಪುಗೊಂಡದ್ದೇ ಎರಡು ದಿನಗಳ ಲೇಪಾಕ್ಷಿ–ತಡಿಪತ್ರಿ–ಗಂಡಿಕೂಟ– ಬೆಲ್ಲಂ ಗುಹೆಗಳ ಪ್ರವಾಸ. ವಿಜಯನಗರ ಸಾಮ್ರಾಜ್ಯವೆಂದರೆ ಕೂಡಲೇ ನೆನಪಾಗುವುದು "ಹಂಪಿ", ಇನ್ನೂ ಮುಂದೆ ಲೇಪಾಕ್ಷಿ, ತಡಿಪ್ರತಿ ಕೂಡ!

ಲೇಪಾಕ್ಷಿ:

ಸ್ನೇಹಿತೆಯ ಬೆಂಗಳೂರಿನ ಮನೆಯಿಂದ ಬೆಳಗ್ಗೆ ಹೊರಟಿದ್ದು ಲೇಪಾಕ್ಷಿಗೆ. ಬೆಂಗಳೂರಿನಿಂದ 135 ಕಿ.ಮಿ ದೂರದಲ್ಲಿರುವ ಲೇಪಾಕ್ಷಿಯನ್ನು NH-7 ಬೆಂಗಳೂರು ಹೈದರಾಬಾದ್ ಹೆದ್ದಾರಿ ಮೂಲಕ ತಲುಪಬಹುದು. ಪಕ್ಕದಲ್ಲಿ ನಂದಿಬೆಟ್ಟ, ಹೂವಿನ ತೋಟಗಳು, ದ್ರಾಕ್ಷಿ ತೋಟಗಳನ್ನು ಬೆಳಗ್ಗಿನ ತಂಪಿನ ವಾತಾವರಣದಲ್ಲಿ ನೋಡುತ್ತಾ ಸಾಗುವಾಗ ರಸ್ತೆ ಸವೆಯುವುದೇ ಗೊತ್ತಾಗುವುದಿಲ್ಲ. ಲೇಪಾಕ್ಷಿ ಸಿಕ್ಕಿತೆಂದು ದಾರಿಯಲ್ಲಿನ ಸೈನ್ಬೋರ್ಡ ಜೊತೆಗೆ ಬೆಟ್ಟದ ಮೇಲಿರುವ ದೊಡ್ಡ ಗರುಡ ಪಕ್ಷಿಯು ಸೂಚನೆ ಕೊಡುತ್ತದೆ. ಆಂಧ್ರಪ್ರದೇಶದ ಅನಂತಮರ ಜಿಲ್ಲೆಯ ಒಂದು ಸಣ್ಣ ಊರು ಲೇಪಾಕ್ಷಿ. ಅಲ್ಲಿರುವ ವೀರಭದ್ರಸ್ವಾಮಿಯ ದೇವಸ್ಥಾನವನ್ನು 1583 ರಲ್ಲಿ ವೀರಣ್ಣ ಮತ್ತು ವಿರೂಪಣ್ಣ ಎಂಬವವರು ವಿಜಯನಗರ ಶೈಲಿಯಲ್ಲಿ ನಿರ್ಮಿಸಿದರು ಎಂದು ಇತಿಹಾಸ ಹೇಳುತ್ತದೆ.

ಸ್ಥಳ ಹುರಾಣ: ರಾಮಾಯಣದಲ್ಲಿ ಸೀತೆಯನ್ನು ಮಷ್ಪಕ ವಿಮಾನದಲ್ಲಿ ಹೊತ್ತೊಯ್ಯುತ್ತಿದ್ದ ರಾವಣನನ್ನು ತಡೆದು, ಅವನಿಂದ ಮಾರಣಾಂತಿಕವಾಗಿ ಗಾಯಗೊಂಡ ಜಟಾಯುವನ್ನು ಮುಂದೆ ರಾಮ ಕಂಡಾಗ, "ಲೇ ಪಕ್ಷಿ ಏಳು" ಎಂದು ಹೇಳಿದ್ದ, ಆ ಪ್ರಸಂಗದಿಂದ "ಲೇಪಾಕ್ಷಿ" ಎಂಬ ಹೆಸರು ಬಂದಿತು ಎಂದು ಹೇಳಲಾಗುತ್ತದೆ. ಸ್ಕಂದ ಮರಾಣದಲ್ಲಿಯೂ ಲೇಪಾಕ್ಷಿಯ ಉಲ್ಲೇಖ ಬರುತ್ತದೆ. ದೇವಸ್ಥಾನವನ್ನು ಪ್ರವೇಶಿಸಿದ ತಕ್ಷಣ ಕಲ್ಲಿನ ಕೆತ್ತನೆಯ ಅದ್ಭುತಲೋಕವನ್ನು ನೋಡಬಹುದು, ನಾಟ್ಯಮಂಟಪದಲ್ಲಿ ಸುಂದರವಾದ ಕೆತ್ತನೆಗಳುಳ್ಳ ಕಂಬಗಳು, ಶಿವ, ಪಾರ್ವತಿ, ಋಷಿಮುನಿಗಳ ಕೆತ್ತನೆಗಳು, ನರ್ತಕಿಯರು, ಸಂಗೀತಗಾರರ ವಿವಿಧ ಭಂಗಿಗಳು, ನವಿಲು, ಆನೆ, ಸಿಂಹಗಳ ಕೆತ್ತನೆಗಳನ್ನು ಕಾಣಬಹುದು. ಗರ್ಭಗುಡಿಯಲ್ಲಿ ವೀರಭದ್ರನ ವಿಗ್ರಹ, ಪಾರ್ವತಿಯ ವಿಗ್ರಹ ಹಾಗೂ ಅಗಸ್ತ್ರರು ಸ್ಥಾಪಿಸಿದರು ಎಂಬಲಾದ ಶಿವಲಿಂಗವಿದೆ.

ರಾಮಾಯಣ, ಮಹಾಭಾರತ ಹಾಗೂ ಪುರಾಣಗಳ ಬಣ್ಣದ ಚಿತ್ರಗಳನ್ನು ಛಾವಣಿಯಲ್ಲಿ ರಚಿಸಲಾಗಿದೆ. ದೇವಸ್ಥಾನದ ಆವರಣದಲ್ಲಿ ಅಚ್ಚುಕಟ್ಟಾದ ಕಂಬಗಳುಳ್ಳ ಪಡಸಾಲೆಗಳು ಬಿಸಿಲಹೊತ್ತಿನಲ್ಲಿ ತಂಪನ್ನು ಕೊಡುತ್ತದೆ ಹಲವಾರು ಹಳೆಯದಾದ ಮರಗಳನ್ನು ಸಹ ಕಾಣಬಹುದು. ಈ ದೇವಸ್ಥಾನವು ಬೆಳಿಗ್ಗೆ 6 ಗಂಟಿಗೆ ತೆರೆಯುವುದರಿಂದ ಮುಂಜಾವು ಅಥವಾ ಸಾಯಂಕಾಲ ಲೇಪಾಕ್ಷಿಯನ್ನು ಸಂದರ್ಶಿಸುವುದು ಒಳ್ಳೆಯದು. ಬಿಸಿಲಿನ ತಾಪಕ್ಕೆ, ಕಲ್ಲಿನಿಂದ ನಿರ್ಮಿತವಾದ ದೇವಸ್ಥಾನವನ್ನು ಸಮಯಕೊಟ್ಟು ನೋಡಲು ದಣಿವಾಗಬಹುದು.

ವೀರಭದ್ರಸ್ವಾಮಿ ದೇವಸ್ಥಾನದಲ್ಲಿರುವ ಆಕಾಶ ಸ್ತಂಭವು ಕೆಳಗಿನ ಭೂಮಿಯನ್ನು ಸ್ಪರ್ಷಿಸುವುದಿಲ್ಲ. ಪ್ರವಾಸಿಗರು ಕೆಳಗಿನಿಂದ ಬಟ್ಟೆಯನ್ನು ತೂರಿಸಿ ತೆಗೆಯುವುದನ್ನು ಅಲ್ಲಿ ನೋಡಬಹುದು. ನಾವೂ ಮಾಡಬಹುದು ಸಹ! ಇಪ್ಪತ್ತೇಳು ಅಡಿ ಉದ್ದ, ಹದಿನೈದು ಅಡಿ ನಂದಿಯು ಲೇಪಾಕ್ಷಿಯ ಮತ್ತೊಂದು ವಿಷೇಶತೆ. ಒಂದೇ ಕಲ್ಲಿನಲ್ಲಿ ಕೆತ್ತಲ್ಪಟ್ಟ ಭಾರತದ ಅತೀ ದೊಡ್ಡ ನಂದಿ ಎಂಬ ಹೆಗ್ಗಳಿಕೆ ಈ ನಂದಿಯದು! ಏಕಶಿಲಾ ನಾಗಲಿಂಗ, ಗಣಪತಿ ಸೀತೆಯದು ಎಂದು ನಂಬಲಾದ ಪಾದದ ಗುರುತು, ಪೂರ್ತಿಗೊಳ್ಳದೇ ಅರ್ಧ ನಿರ್ಮಿತವಾದ ಕಲ್ಯಾಣ ಮಂಟಪವು ಲೇಪಾಕ್ಷಿಯ ವಿಜಯನಗರ ಸಾಮ್ರಾಜ್ಯದ ಕಾಲದಲ್ಲಿ ಉಚ್ಛಾರ್ರಯ ಸ್ಥಿತಿಯಲ್ಲಿತ್ತು ಎಂದು ತಿಳಿಸುತ್ತದೆ. ದೇವಸ್ಥಾನದ ಅನತಿ ದೂರದಲ್ಲಿರುವ ಬೆಟ್ಟದ ಮೇಲೆ ಇತ್ತೀಚೆಗೆ ನಿರ್ಮಿಸಲ್ಪಟ್ಟ ಜಟಾಯು ಪಕ್ಷಿಯ ದೊಡ್ಡ ಪ್ರತಿಮೆಯಿದೆ.

ಅನಂತಪುರ ಜಿಲ್ಲೆಯ ಲೇಪಾಕ್ಷಿಯಿಂದ ಹೊರಟದ್ದು ಕಡಪ ಜಿಲ್ಲೆಯ ಗಂಡಿಕೂಟದ ಕಡೆಗೆ. ಮಧ್ಯೆ ದಾರಿಯಲ್ಲಿ ಸಿಕ್ಕ ಸುಂದರವಾದ

ಕೆರೆಯ ಬಳಿಯಲ್ಲಿ ಸ್ನೇಹಿತೆಯು ಬೇಗನೆ ಎದ್ದು ಪ್ರೀತಿಯಿಂದ ಕಟ್ಡಿಕೊಂಡು ಬಂದಿದ್ದ ಬುತ್ತಿಯನ್ನು ಬಿಚ್ಚಿ ಹೊಟ್ಟೆ ತುಂಬಿಸಿಕೊಂಡು ಮುಂದುವರಿದೆವು. ಆ ದಾರಿಯಲ್ಲಿ ಉಪಹಾರಗೃಹಗಳು ಇದ್ದದ್ದು ಕಡಿಮೆ.

ಲೇಪಾಕ್ಷಿಯಿಂದ ಗಂಡಿಕೂಟ ಸುಮಾರು 200 ಕಿ.ಮೀ ದೂರದಲ್ಲಿದೆ. ಈ ದಾರಿಯ ಮಧ್ಯೆ ಸುಮಾರು 120 ಕಿ.ಮೀ ಆದಮೇಲೆ ಸಿಗುವುದೇ ತಡಿಪತ್ರಿ. ಈ ತರಹದ ಊರು ಇರುವ ಜ್ಞಾನವೂ ಇರಲಿಲ್ಲ. ಗಂಡಿಕೂಟದ ದಾರಿಯನ್ನು ಅಂತರ್ಜಾಲದಲ್ಲಿ ಹುಡುಕುವಾಗ ಇದರ ಮಾಹಿತಿ ಸಿಕ್ಕಿದ್ದು! ಎಲ್ಲಾ ಪ್ರವಾಸಿಗರು ಶುರುಮಾಡಿದ್ದು "ಅದ್ಭುತ" ಎಂಬ ಪದದೊಂದಿಗೆ! ಹಾಗಾಗಿ ಇದನ್ನು ನೋಡಲೇಬೇಕು ಎಂದು ತೀರ್ಮಾನಿಸಿ ಆಗಿತ್ತು. ಮಕ್ಕಳೆಲ್ಲಾ ಮತ್ತೊಂದು " History tour " ಎಂದು ಮುಖ ಜೋಳು ಬಿಟ್ಟಿದ್ದರು. ತಡಿಪತ್ರಿಯ ಬುಗ್ಗ ರಾಮಲಿಂಗೇಶ್ವರ ಸ್ವಾಮಿ ದೇವಸ್ಥಾನ. ಪೆನ್ನಾ ನದಿಯ ದಡದಲ್ಲಿರುವ ಈ ದೇವಸ್ಥಾನವನ್ನು ವಿಜಯನಗರ ಸಾಮ್ರಾಜ್ಯದ ಸಾಮಂತರಾದ ಪೆಮ್ಮಸಾನಿ ರಾಮಲಿಂಗ ನಾಯುಡು 1490–1509 ರಲ್ಲಿ ನಿರ್ಮಿಸಿದನು. ಅಲ್ಲಿರುವುದು "ಸ್ವಯಂ ಭೂ" ಲಿಂಗವಂತೆ ಗರ್ಭಗುಡಿಯ ಮಂದಿರದ ಕಂಬಗಳಿಂದ ಸ0ಗೀತದ ಸಪ್ತಸ್ವರಗಳು ಹೊರಹೊಮ್ಮುತ್ತದೆ! ಈ ದೇವಸ್ಥಾನದ ಅಗಾಧವಾದ ಮುಖದ್ವಾರದ ನಿರ್ಮಾಣವು ಪೂರ್ಣಗೊಂಡಿಲ್ಲ. ಸುಂದರವಾದ ಕೆತ್ತನೆಗಳು ರಾಮಾಯಣ, ಮಹಾಭಾರತದ ಮರಾಣಗಳ ಸನ್ನಿವೇಶಗಳ ಕೆತ್ತನೆಗಳನ್ನು ಒಳಗೊಂಡ ಈ ಅರೆನಿರ್ಮಿತ ಮುಖ್ಯದ್ವಾರದ ಗೋಪುರದ ಕೆಳಗಿನ ಭಾಗವೇ ಇಷ್ಟು ಸುಂದರವಾಗಿ–ಇಷ್ಟು ಅಗಾಧವಾಗಿದೆ ಎಂದರೆ ಪೂರ್ಣಗೊಂಡ ಅದರ ಎತ್ತರವನ್ನು ಕಲ್ಪಿಸಿಕೊಂಡಾಗ, ಇತರ ಪ್ರವಾಸಿಗರಿಗಾದ ಅನುಭವವೇ ಆಯಿತು.

ಗರ್ಭಗುಡಿಯಲ್ಲಿರುವ ಲಿಂಗದಬಳಿ ಅಂತರ್ಜಲ ನೀರಿನ ಚಿಲುಮೆಯಿದೆ ಆದ್ದರಿಂದ ಈ ದೇವಸ್ಥಾನಕ್ಕೆ ಬುಗ್ಗ (ಚಿಲುಮೆ) ರಾಮಲಿಂಗೇಶ್ವರಸ್ವಾಮಿ ದೇವಸ್ಥಾನವೆಂಬ ಹೆಸರು. ಜೊತೆಗೆ ಹಂಪಿಯ ವಿಜಯವಿಠ್ಠಲ ದೇವಸ್ಥಾನದಲ್ಲಿರುವಂತೆ ಚಿಕ್ಕದಾದ ಕಲ್ಲಿನ ರಥ ಕೂಡ ಇಲ್ಲಿ ನೋಡಬಹುದು. ಸಂಜೆಯ ತಂಪಿನಿಂದ ಧಣಿವು ಕಳೆದು ಸೂರ್ಯಾಸ್ತದಷ್ಟರಲ್ಲಿ ಗಂಡಿಕೂಟವನ್ನು ತಲುಪಲು ಪಯಣವನ್ನು ಮುಂದುವರಿಸಿದೆವು.

ಗಂಡಿಕೂಟ– Great canyon of India ಎಂದು ಪ್ರಸಿದ್ಧಿ ಪಡೆದಿದೆ. ಬೋನಸ್ ಎಂಬಂತೆ ತಡಿಪತ್ರಿ ಮತ್ತು ಗಂಡಿಕೂಟದ ದಾರಿಯುದ್ದಕ್ಕೂ ಇಳಿಯುತ್ತಿದ್ದ ಸೂರ್ಯನ ಜೊತೆಗೆ ಪ್ರಯಾಣ, ರಸ್ತೆಗುಂಟ ದೂರದಲ್ಲಿ ಬೆಟ್ಟಗಳು, ಬೆಟ್ಟಗಳ ಮೇಲೆ ಕಣ್ಣು ಹಾರಿಸಿದಷ್ಟು ನೂರಾರು ಗಾಳಿಯಂತ್ರಗಳು (Windmill), ಅಷ್ಟು ಗಾಳಿಯಂತ್ರಗಳನ್ನು ನೋಡಿದ್ದು ಮೊದಲಬಾರಿ!

ಇದಕ್ಕೆ ತದ್ವಿರುದ್ದವಾಗಿ ಪ್ರಯಾಣದ ಮೊದಲಾರ್ಧದಲ್ಲಿ ಬೃಹತ್ ಆದ ನಿರಾಶ್ರಿತರ ಪುನರ್ವಸತಿಯ ಜಾಗವನ್ನು ನೋಡಿದ್ದೆವು. ಸಾಲು ಸಾಲು ಉರಿಬಿಸಿಲಿನಲ್ಲಿದ್ದ ಸಾಲು ಸಾಲು ಜಂಕ್ಶೀಟ್ ಮನೆಗಳು, ಅಷ್ಟು ಜನ ಹೊರಗೆ ಹವಾನಿಯಂತ್ರಿತ ವಾಹನದೊಳಗೆ ನಾವು.

ಜೀವನ ವೈರುಧ್ಯವೇ ಅಥವಾ ನನ್ನ ಆಯ್ಕೆಯೇ? ಎಂದು ಜಿಜ್ಞಾಸೆಯಲ್ಲಿ ತೊಡಗುವ ಮುನ್ನವೇ ಪಕ್ಕದಲ್ಲಿ ತೂಕಡಿಸುತ್ತಿದ್ದ ಮಕ್ಕಳ ಮುಗ್ಧ ಮುಖದಲ್ಲಿ ಕಳೆದುಹೋಗುವುದೇ ಲೇಸು ಎಂದು ಸುಖವನ್ನು ಬಯಸುವ ಮನಸ್ಸು ಹೇಳಿತು!

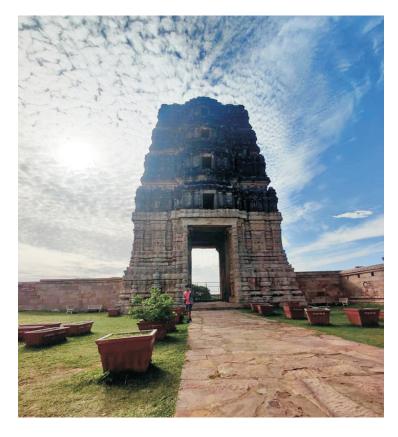
ಸಂಜೆಯ ತಂಪಾದ ಗಾಳಿಯಲ್ಲಿ ಸೂರ್ಯನ ಜೊತೆ ಸಾಗುತ್ತಾ ತಲುಪಿದ್ದು ಗಂಡಿಕೂಡಕ್ಕೆ. ಕಡಪ ಜಿಲ್ಲೆಯ ಪೆನ್ನಾ ನದಿಯ ಬಲದಂಡೆಯಲ್ಲಿರುವುದು ಗಂಡಿಕೂಟ ಎಂಬ ಹಳ್ಳಿ ಇತಿಹಾಸ ಪ್ರಸಿದ್ಧವಾದ, ಹಿಂದೆ ಬಹಳ ಶಕ್ತಿಶಾಲಿಯಾದ ಕಲ್ಯಾಣಿ ಚಾಲುಕ್ಯರು, ಪೆಮ್ಮಸಾನಿ ನಾಯಕರು, ಗೋಲಕೊಂಡ ಸುಲ್ತಾನರು ಆಳಿದ ಸ್ಥಳ. ಇದಕ್ಕೆಲ್ಲಾ ತಿಲಕವಿಟ್ಟಂತೆ ಇರುವುದು ಪೆನ್ನಾ ನದಿಯು ಇರ್ರಾಮಾಲ ಬೆಟ್ಟ/ ಗಂಡಿಕೂಟ ಬೆಟ್ಟವನ್ನು ಕೊರೆದು ಉಂಟುಮಾಡಿದ ಆಳವಾದ ಕಣಿವೆ. ಇಳಿದು ಮರೆಯಾಗುತ್ತಿದ್ದ ರವಿಯ ಕಿರಣಗಳು ಕೆಳಗೆ ಬೆಟ್ಟದ ಪಾದದಲ್ಲಿ ಬಾಗುತ್ತಾ ಸಾಗುತ್ತಿದ್ದ ಪೆನ್ನಾ ನದಿಯು ಕೊರೆದಿದ್ದ ಕಡಿದಾದ, ಕಿರಿದಾದ ಕಣಿವೆಯ ಗೋಡೆಯ ಮೇಲೆ ಹಳದಿ, ಕೇಸರಿ, ಕೆಂಪು ಬಣ್ಣದ ಚಿತ್ತಾರ ಬಿಡಿಸುತ್ತಿತ್ತು.

ಪ್ರಕೃತಿಯ ಸೊಬಗನ್ನು ಸವಿಯುತ್ತಾ ಮನಸ್ಸು ಶಾಂತವಾಗುತ್ತಾ, ತೃಪ್ತಿಯಾಗುವುದು ಅನುಭವಕ್ಕೆ ಬಂದಿದ್ದು ದಿಟ! ಗಂಡಿಕೂಟದಲ್ಲಿ ಪ್ರವಾಸಿಗರು ಉಳಿದುಕೊಳ್ಳಲು ಹವಾನಿಯಂತ್ರದ ಸ್ನಾನದ ಗೃಹದ ಜೊತೆಗಿರುವ ಟೆಂಟ್ಗಳು, ಸಾಧಾರಣ ಟಿಂಟ್ಗಳು ಹಾಗೂ ಕಣಿವೆಯ ಸಮೀಪದಲ್ಲೇ ಆಂಧ್ರಪ್ರದೇಶದ ಟೂರಿಸಮ್ ವಿಭಾಗದವರ ವಸತಿಗೃಹಗಳು ಲಭ್ಯ. ಮುಂಚಿತವಾಗಿ ತಿಳಿಸಿದರೆ ರಾತ್ರಿಯ ಊಟ, ವಸತಿ ಮತ್ತು ಬೆಳಗ್ಗಿನ ಉಪಹಾರದ ವ್ಯವಸ್ಥೆಯನ್ನು ಮಾಡಿಕೊಡಲು ಹಲವಾರು ಏಜೆಂಟ್ಗಳು ಇರುತ್ತಾರೆ. ನಾವು ಅಲ್ಲಿ ಉಳಿದುಕೊಂಡಿದ್ದು ಹುಣ್ಣಿಮೆಯ ಮಾರನೆಯದಿನ. ಹಾಗಾಗಿ, ಚಂದ್ರನ ಬೆಳಕಿನಲ್ಲಿ ಕಣಿವೆಯ ಸೌಂದರ್ಯವನ್ನು ಸವಿಯುವ ಭಾಗ್ಯವೂ ನಮಗಾಯಿತು. ಮಾರನೆಯ ದಿನ ಮಕ್ಕಳೆಲ್ಲರೂ ಉತ್ಸುಕರಾಗಿ ತಯಾರಾಗಿ ಸೂರ್ಯೋದಯವನ್ನು ಕಣ್ಣುತುಂಬಿಸಿಕೊಂಡರು. ನಂತರ ಕಣಿವೆಯಿಂದ ಅರ್ಧಕಿಲೋ ಮೀಟರ್ ದೂರದಲ್ಲಿದ್ದ ಗಂಡಿಕೂಟ ಕೋಟೆಯ ಕಡೆಗೆ ಹೊರಟಿವು.

ಅಲ್ಲಿಂದ ಮುಂದೆ 61 ಕಿ.ಮೀ ಘಂಟೆ ಪ್ರಯಾಣಮಾಡಿ ತಲುಪಿದ್ದು ಕರ್ನೂಲ್ ಜಿಲ್ಲೆಯಲ್ಲಿರುವ ಬೆಲ್ಲಂ ಗುಹೆ. ಸಾರ್ವಜನಿಕರಿಗೆ ತೆರೆದಿರುವ ಭಾರತದ ದೊಡ್ಡ ಮತ್ತು ಉದ್ದ ಗುಹೆಗಳು ಎಂದು ಬೆಲ್ಲಂ ಗುಹೆಗಳಿಗೆ ಹೇಳುತ್ತಾರೆ. ಇದು ಸುಮಾರು 3.2 ಕಿ.ಮೀ ಉದ್ದವಿದ್ದೂ, ಸಿಹಿನೀರಿನ ಚಿಲುಮೆಗಳು, Stalactite, stalagmite ರಚನೆಗಳನ್ನು ನೋಡಬಹುದು. ಇದು ಹತ್ತಾರು ಸಾವಿರ ವರುಷಗಳ ಹಿಂದೆ ಕಣ್ಣರೆಯಾಗಿರುವ ಚಿತ್ರವತಿ ನದಿಯಿಂದ ಆಗಿರುವುದು ಎಂದು ಪ್ರಾಕ್ತತಜ್ಞರು (Archeologist) ಹೇಳಿದ್ದಾರೆ. ಇರ್ರಲೈ ಬೆಟ್ಟಗಳಲ್ಲಿ ಈ ಗುಹೆಗಳಲ್ಲದೇ, ಇತರೆ ಗುಹೆಗಳು ಸಹ ಇವೆ ಎಂದು ಸ್ಥಳೀಯರು ಹೇಳುತ್ತಾರೆ. ಇದರ ಸಂಶೋಧನೆಯಾಗಿ ಅದರ ಪ್ರಾಮುಖ್ಯತೆ ಬಗ್ಗೆ ಗೊತ್ತಾಗಿದ್ದು 1982 ರಲ್ಲಿ. ಗುಹೆಯೊಳಗೆ ಕ್ರಿ.ಪೂ. 4500 ರಷ್ಟು ಹಳೆಯದಾದ ಪಾತ್ರೆಗಳು ಸಿಕ್ಕಿವೆ. ಬೌದ್ಧ ಭಿಕ್ಷುಗಳು ಇಲ್ಲಿದ್ದರೆಂದು ತಿಳಿದುಬಂದಿದೆ.

ಕೋಟಿಲಿಂಗಗಳ ಗುಹೆ, ಸಪ್ತಸ್ವರಗಳ ಗುಹೆ, ಧ್ಯಾನ ಮಂದಿರ ಗುಹೆಯ ಒಳಗೆ ನೋಡಬಹುದಾದ ಜಾಗಗಳು. ಗುಹೆಯ ಅತ್ಯಂತ ಆಳವಾದ ಸ್ಥಳ ಪಾತಾಳಗಂಗೆ.

ಇಲ್ಲಿ ವರ್ಷವಿಡೀ ಹರಿಯುವ ಝರಿಯಿದ್ದು, ನೀರು ಅಲ್ಲೇ ಭೂಮಿಯ ಒಳಗೆ ಹೋಗುತ್ತದೆ. ಅಲ್ಲಿ ಒಂದು ಶಿವಲಿಂಗ ಸಹ ಸ್ಥಾಪಿಸಲ್ಪಟ್ಟಿದೆ. ಹೀಗೆ ಎರಡು ದಿನಗಳಲ್ಲಿ ವಿಜಯನಗರ ಸಾಮ್ರಾಜ್ಯದ ಕಲಾವೈಭವವನ್ನು ಸಾರುವ ಸ್ಥಳಗಳನ್ನು, ಪ್ರಕೃತಿಯ ವಿಸ್ಮಯಗಳನ್ನು



ಲೇಪಾಕ್ಷಿ-ತಡಿಪತ್ರಿ-ಗಂಡಿಕೂಟ- ಬೆಲ್ಲಂ ಗುಹೆಗಳಲ್ಲಿ ನೋಡಿ ಬೆಂಗಳೂರಿಗೆ ರಾತ್ರಿ ವಾಪಾಸಾದೆವು!



ನಿಲ್ಲ! ನಾನು PATH ವರ್ಣ! ನಾನು ಯಾರು ಹೇಳಬಲ್ಲರೇನು?



Professor and Head, Pathology S.S. Institute of Medical Sciences and Research Centre Davangere

ಪ್ರಶ್ನೆಗಳು

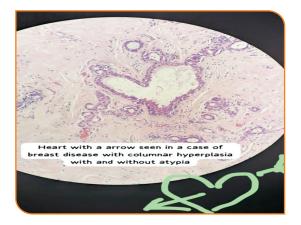
Dr. Shashikala P

- 1. ನನ್ನ ಬಣ್ಣ ಹೆಣ್ಣು ಮಕ್ಕಳಿಗೆ, ನಿಮ್ಮ ಬಣ್ಣ ಗಂಡು ಮಕ್ಕಳಿಗೆ ನಮ್ಮಿಬ್ಬರ ಬಣ್ಣದ ಜೋಡಿ ರೋಗನಿರ್ಣಯಕ್ಕೆ !
- 2. ಕಪ್ಪಾದರೇನು? ಕಬ್ಬಿಣ ನಾನಲ್ಲ ನನ್ನಲ್ಲಿರುವುದು ಬೆಳ್ಳಿ,ಚಿನ್ನ!
- 3. ತ್ರಿವರ್ಣವಾದರೂ ಬಾವುಟವಲ್ಲ ಕೆಂಪೇರಿದರೂ ಕೋಪ ನನಗಿಲ್ಲ!
- 4. ಕಪ್ಪು ಕಪ್ಪೆಂದು ಜರಿಯದಿರಿ ಸೂಕ್ಷಾತಿ ಸೂಕ್ಷ್ಮಗಳ ತೋರುವೆ ನಾನು!
- 5. ಕಪ್ಪು ಮುಖವ ತಿಳಿಯಾಗಿಸುವ ಸೌಂದರ್ಯದಾಯಕ <mark>ನಾ</mark> ನಿಮ್ಮ ಪ್ರ<mark>ಯೋಗಾ</mark>ಲಯದಲ್ಲೂ ಬೇಕಾದವ!
- 6. ಪರೀಕ್ಷೆಯಲ್ಲಿ ಯಶಸ್ಸನ್ನು ನೆನಪಿಸುವುದು ನನ್ನ ಹೆಸರು.
- 7. ಏನೇ ಪ್ರತಿರೋಧಕ ಬಳಸಿದರೂ <mark>ನನ್ನದದೇ ಬಣ್ಣ ನಾ ಎಲ್ಲಿರುವೆ,ಹೇಗಿರುವೆ ಎಂಬು</mark>ದೇ ನಾ ನೀಡುವ ಸುಳಿವು.
- ಮದ್ಯ ಹಾಗೂ ಆಮ್ಲಕ್ಕೂ ಬಗ್ಗದ ಹೊದಿಕೆಯವನ ಗುರ್ತಿಸುವ ಬಗೆ?
- 9. ಬಿಳಿಚಿಕೊಂಡಿದ್ದರೆ ನಾ ನಿಮಗೆ ಉಪಕಾರಿ ಬಣ್ಣದ ಬಟ್ಟೆ ಧರಿಸಿದರೆ ಚೆಲ್ಲುವಿರಿ.
- 10. ಬಣ್ಣ ಬದಲಿಸುವ ಊಸರವಳ್ಳಿ ದಿನ ನಿತ್ಯ<mark>ದ ಬಳಕ</mark>ೆಯಲ್ಲಿ.
- 11. ಲೋಹದ ಶೋಧಕನಾನು ಒಂದು ದೇಶ<mark>ದ ಸೈನಿಕ</mark>ರಂತೆ ನನ್ನ ಬಣ್ಣ.
- 12. ಕ್ರಿಮಿಯಿಂದ ಬಂದ ನಾನು ಒಂದು ರೀತಿಯ ಶಿಲೀಂಧ್ರವನ್ನು ಕೆಂಪಾಗಿಸುವೆ.
- 13. ಹಣ್ಣಾದ ಮೇಲೆ ಬಣ್ಣವಾಗುವೆ ನಿಸರ್ಗದತ್ತವಾದರೂ ನನ್ನಹೆಸರಲ್ಲಿ ರಕ್ತವಿದೆ.
- 14. ಸಿಹಿತನವನ್ನು ಗುರ್ತಿಸಲು ಉಗುಳುವಿರಿ ನಂತರ ಬಣ್ಣ ಹಚ್ಚುವಿರಿ
- 15. ಕಪ್ಪಾದರೂ ಬೆಳ್ಳಿ ನನ್ನಲ್ಲಿಲ್ಲ ಧಮನಿಗಳ ಏರುಪೇರು ಗುರ್ತಿಸುವೆ ನಾನು.

ಉತ್ತರಗಳು (Answers in English)

- 1 Hematoxylin and Eosin Stain
- 2 Reticulin Stain (It's a Silver stain, Reticulin Fibers are Black. We use Gold Chloride for toning)
- 3 Masson's Trichrome Stain (Three or Tri- colour and Red colour due to Beibreich Scarlet)
- 4 Warthin Starry Silver Stain (demonstrate microorganisms and fungi)
- 5 Melanin Bleach technique
- 6 PAS- Periodic Acid Schiff Stain
- 7 Immunohistochemistry (End Result is Brown colour)
- 8 ZN stain (Mycobacterium Tuberculosis is AAFB Acid and alcohol fast Bacteria)
- 9 Schiff reagent used in PAS stain (it is colourless Leuco Basic Fuchsin reagent and discarded when it turns Pink)
- 10 Metachromatic Stains
- 11 Perls prussian blue stain
- 12 Mucicarmine stain (carminic Acid is obtained from Cochineal insect Dactylopus Coccus? stains capsule of cryptococci)
- 13 Haematoxylin (The oxidation product of hematoxylin is hematein. This conversion process is called "ripening")
- 14 Periodic Acid-Schiff (PAS) with diastase (PAS-D) refers to the use of the PAS stain in combination with diastase, which is an enzyme that digests the glycogen. Diastase is Present in Saliva?
- 15 Verhoeff stain, also known as the Verhoeff-van Gieson stain is one of the most commonly-used stains to visualize elastic tissue in blood vessel walls? which appears black.

LENSART



HEART WITH AN ARROW

Dr. Madhuri Dindalkoppa,

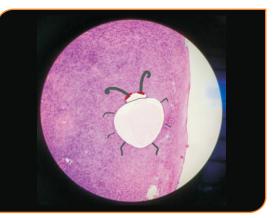
Assistant Professor,

KLE's Jagadguru Gangadhar Mahaswamigalu

Moorusavirmath Medical College, Hubballi.

A BUG - ANIMAL KINGDOM IN CYSTIC OVARY

Dr. Chaitra N, Assistant Professor, Sri Siddhartha Medical College, Tumkur



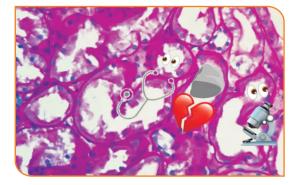


A HISSING SNAKE - ANIMAL KINGDOM IN CYSTIC OVARY

Dr. Chaitra N, Assistant Professor, Sri Siddhartha Medical College, Tumkur

Dr. Salman Rahiman, Post graduate, JSS Medical College, Mysore





NEVER FIGHT TO GET IT RIGHT

Dr Ranjana Ranade,

Associate Professor, KAHER's Jagadguru Gangadhar Mahaswamigalu Moorusavirmath Medical College, Hubballi

PATHARTIST BRAIN

Dr Ragavi V,

Assistant Professor, St Peter's Medical College and Hospital, Hosur.





MUCOR ROSES

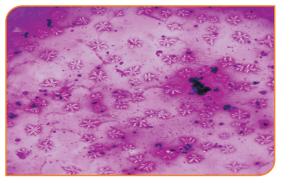
Dr Ranjana Ranade,

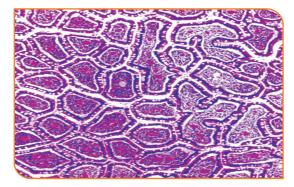
Associate Professor, KAHER's Jagadguru Gangadhar Mahaswamigalu Moorusavirmath Medical College, Hubballi

MICRO-WORLD – COPY FLAKES

Dr. Ranjita Chong,

Post Graduate, Kasturba Medical College, Central lab, Mangalore.





MICRO-WORLD

Dr. Ranjita Chong,

Post Graduate, Kasturba Medical College, Central lab, Mangalore

ONCOTALK with Dr Geetashree Mukherjee

Dr Geetashree Mukherjee Senior Consultant and Head, Histopathology Tata Medical Center, Kolkata.

Dr Geetashree Mukherjee is an Oncopathologist currently working as a Senior Consultant and Head, Histopathology, Tata Medical Center, Kolkata.

She completed her MBBS from Guntur Medical College, Guntur in 1978 and MD Pathology at Rajendra Institute of Medical Sciences, Ranchi in 1982. She did her Senior Residency in JIPMER, Pondicherry from 1982 -84. She was associated with the prestigious Kidwai Memorial Institute of Oncology for a long tenure from 1985 to 2014 and has served in various capacities from lecturer to Professor and head of department of Pathology. After her superannuation she joined Tata Medical center Kolkata, as a Senior Consultant and head, Histopathology

She is a UICC Fellow – ICRETT Fellowship at the Dept. of Pathology & Molecular Biology University of Cambridge, UK, 1999 ; Yamagiwa-Yoshida Memorial UICC international award for 2009 at the MRC Cancer Centre, University of Cambridge, UK.

Her areas of interest are Breast, soft tissue and female genital tract pathology. She has deep interest in cancer research and currently working on tumour infiltrating lymphocytes in solid tumours. She has many ongoing projects in her hand, published over 70 peer-reviewed articles, and has been an invited speaker at major national and international pathology meetings.

Excerpts of the interview with Dr Geetashree Mukherjee

1. Why did you choose to become a pathologist?

My father was a pathologist who inspired me.

2. What did you like most about being a pathologist?

"DIAGNOSIS". I think diagnosis is the most important part for any disease and it is ultimately pathology that drives the management plans to treat patients.

3. We all know you have been associated with oncopathology for a long time. What is special about this subspeciality?

Oncopathology I find to be challenging and intellectually stimulating. We not only render a specific diagnosis, but also grade and stage tumours and thereby prognosticate the disease. This has a great impact on patient treatment. I have seen the transition from morphology to the introduction of immunohistochemistry and now different molecular tests in one life. Having a good fundamental knowledge of the disease, pathologists are at the interface of clinicians and scientists and have a critical role to play in cancer research.

4. What is your advice to the young pathologists who aspire to become oncopathologists?

With advances in molecular science, there is a changing trend in the way oncopathology is being perceived. Since the field is vast, young pathologists should have a focused interest to sub-specialize and go deep in a particular form of cancer. This will help them gain deeper insight into the biology of the disease which can make a difference in the way of their thinking and approach to diagnosis and translational research in oncology.

5. Now that molecular pathology is integral to oncopathology, what is your message to young oncopathologists?

Yes, oncopathology is a very challenging career and has plenty to offer. Now, pathology is no longer a "behind the scene" practice. With recent advances in molecular techniques, pathologists are at the forefront, guiding treatment decisions in multidisciplinary disease management groups. So, with the rise in the incidence of cancer, young pathologists should more and more opt for specialization in oncopathology.

6. What do you think needs to change in the Indian pathology scenario?

The Indian education system needs a paradigm shift with more dedicated and motivating teachers. The concepts of molecular biology and basic statistics should be a part of the medical curriculum. In addition, the postgraduate courses should have these areas adequately covered besides the routine courses in pathology. The incidence of cancer in India is increasing in an exponential manner and reported new cases per year being 13,24,413 (Globocan 2020). WHO predicts that there will be 22 million new diagnoses of cancer per year globally by 2030. Therefore, more super-specialization courses in Pathology should be started.

In key areas of investigation, especially for theranostic biomarkers, at least 4 to 5 central laboratory facilities (region wise) should be made available in India. The Indian

Government (ICMR) did make a beginning by initiating the DIAMONDS project where high end molecular tests for breast and lung cancers are being carried out in referral laboratories. In similar lines, bio-banks having annotated samples should be set up as central facility to provide ready access to scientists, clinicians and pharmaceutical companies. Central and State Governments have a massive role to play.

It's now time for pathologists to come to the fore in a field that has been dominated by clinicians for too long. Inclusion of pathologists into the scientific committees / task forces set up by the Governments should be mandatory for good quality research.

7. How does your typical day go and how do you de-stress from work?

My routine is busy. My usual working hours are 9 to 10 hours a day. Music is my strong hobby and I de-stress with music, reading etc.

8. Pathology is opted by more and more women folk. What is your advice for them regarding work life balance?

Pathology is one of the fields that is ideally suited for women. As the career scope is diverse, people can fit into one of the various options depending on their interests and priorities in life. One can choose from a very demanding and challenging academic career, to not so busy private practice, to a routine non-stressful clinical pathology practice. There are options where people can directly enter research after post-graduation or join industry. There are upcoming options in image analysis and artificial intelligence. The routine schedule for a pathologist is usually flexible with minimal emergency calls and night duties.

Interviewed by Dr Suma M N

Associate Professor of Pathology Kidwai memorial Institute of Oncology Bangalore



Events

XIV Annual KCIAPM State Level Undergraduate Pathology Quiz

The XIV Annual KCIAPM State Level Undergraduate Pathology Quiz was conducted on 9th September 2023 at the Biotechnology auditorium in BVB Campus, Vidyanagar, Hubballi and was hosted by the Department of Pathology, KAHER'S Jagadguru Gangadhar Mahaswamigalu, Moorsaaviramath Medical College, Hubballi, in association with KCIAPM. This event marked the first state-level competition hosted by the budding medical college in Hubballi. A total of 136 students from 38 medical colleges across Karnataka participated in the quiz.

Inauguration of the programme was done by lighting of the microscope at the hands of various dignitaries present on dais; Our beloved Principal, Dr. M.G Hiremath, along with the Honorary Secretary of KCIAPM, Dr. Aditya Agnihotri, Organizing Chairperson and Head of Department, JGMMMC, Dr. Ganga S. Pilli, Head of the Department of Pathology, KIMS, Hubballi Dr. Purushottham Reddy, and the Organizing Secretary, Dr. Ranjana S. Ranade. The invocation was rendered by Miss Kanupriya, Phase II MBBS student. Dr. M.G Hiremath, Principal delivered words of wisdom and conveyed best wishes to all the six finalist teams by giving chocolate bouquet.



A total of six very interesting, interactive and unique rounds were conducted by six amazing quizmasters. All the rounds were hyperlinked to a unique theme consisting of various images to avoid bias and conduct quiz in a fair and just manner.

The winners were declared in descending order. The 5th prize was won by Vijaynagar Institue of Medical Sciences, Bellary (Mr.Kusha Kumar S & Mr.Hemanth Malkapur), 4th prize was a tie between Jawaharlal Nehru Medical College, Belagavi (Mr.Adhitya Porwal & Ms.Roxanne Kanga) And Vydehi Institute of Medical Sciences, Bangaluru (Ms.Likitha A & Ms.Chaitra G). The 3rd prize (2nd runner up) was won by Bangalore Medical College (Mr. Prajwal Kashyap & Mr. Rohit N) and the 2nd prize (1st runner up) were Kodagu Institute of Medical Sciences (Mr.Sumanth S Karanth & Mr.Kemtur Satvik). The winners (1st prize) was bagged by M S Ramaiah Medical College, Bengaluru (Mr.Vignesh Prakash & Mr.Arun Ram).



The participants shared their thoughts on quiz and expressed their appreciation for the several rounds that made it engaging and lively. Vote of thanks was delivered by Dr. Nagaraj T S. Dr Madhuri Dindalkoppa and Dr Prajna Shetty were the emcees for the entire quiz.

With the enthusiastic participation of students from nearly every college in Karnataka, the ongoing support of our Principal, Dr. M.G. Hiremath, the dedicated faculty and quizmasters of the department of Pathology, the hardworking non-teaching staff, and the student volunteers who were always on their toes, the event was a great success.



CME on Lymphoma Kidwai Memorial Institute of Oncology, Bangalore





NATIONAL HANDLOOM DAY 2023

ESIC Medical College, Rajajinagar, Bangalore



Father Muller Medical College, Mangalore



KLE Jagadguru Gangadhar Mahaswamigalu Moorusavirmath Medical College and Hospital, Hubballi



SDM College of Medical Sciences & Hospital, Dharwad



Sri Siddhartha Institute of Medical Sciences & Research Centre, T.Begur



S. S. Institute of Medical Sciences & Research Centre, Davangere





Kasturba Hospital, Manipal





Dr. Chandramma Dayananda Sagar Institute of Medical Education and Research, Dayananda Sagar University, Ramanagara Karnataka



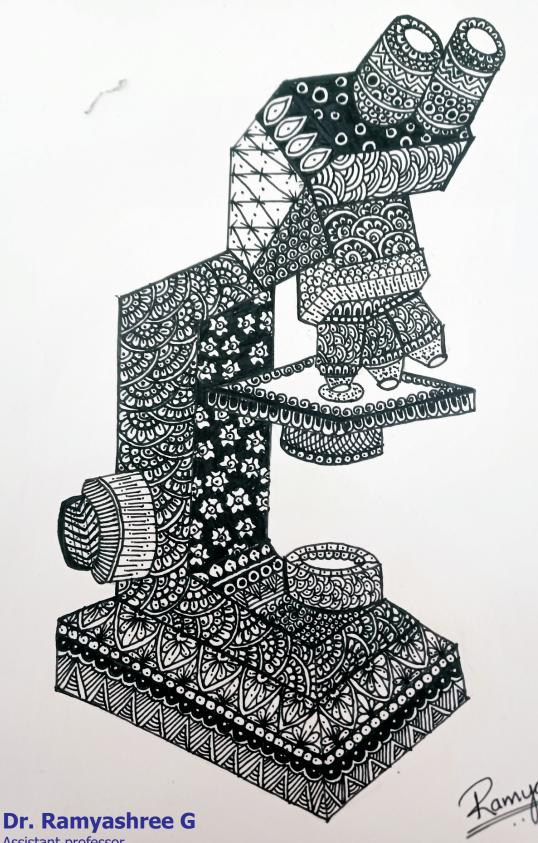
Sapthagiri Institute of Medical Sciences & Research Centre, Bengaluru



KIMS Bengaluru



Gallery - Mandala Art of Microscope



Assistant professor Department of pathology SSIMS DAVANGERE

