

NEWSLETTER



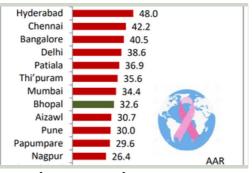
Gandhi Medical College & Hamidia Hospital, Bhopal (M.P.)

Volume 1 Issue 1 October 2023



Article: Breast Cancer

In India the incidence rates are significantly less than the western and American countries but the current trends point out that a higher proportion of the disease is occurring at a younger age in Indian women, as compared to the West.





Brainstroming Case

Hemangiomas are benign vascular lesions. Phleboliths are calcified nodules that can be regarded as a pathognomic feature of hemangioma. Involvement of the shoulder and forearm is very less common. Hemangioma with multiple phlebolith was diagnosed on right shoulder in our case.

Deadly Nipah Virus

The deadly Nipah virus (NiV) has broken out again in Kerala. Nipah virus disease is an emerging zoonotic disease of public health importance in Southeast Asia and the Western Pacific Regions, where large fruit bats (Pteropus), the natural host of the virus, are widespread.



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It is health that is the real wealth, and not pieces of gold and silver. - Mahatma Gandhi

> HAPPY GANDHI JAYANTI 2nd October 2023

FOREWORD

>>> FROM THE DEAN'S DESK

Its gives immense pleasure that Gandhi Medical College, Bhopal is coming out with the newsletter focusing on research and patient care, which is laudable step in the desired direction. This newsletter will provide a platform for the exchange of research ideas and developing strong associations among all the stakeholders. This newsletter will certainly make a substantial contribution in the improvement of health education and patient care of our institute. I take this opportunity to convey my best wishes to the editorial team.



Dr Salil Bhargava Dean & CEO Gandhi Medical College Bhopal

>>> FROM THE SUPERINTENDENT'S DESK

I am glad to know that our institute is bringing out a newsletter under the aegis of the Multidisciplinary Research Unit (MRU). I am sure the newsletter will serve as a knowledge-sharing platform and will be a great boon in evolving innovative healthcare practices and improving hospital services. The newsletter will definitely serve as a showcase of the excellent patient care services provided by Hamidia hospital. I congratulate editorial board on the first release of the Hamidia Hospital, Bhopal newsletter.



Dr Ashish Gohiya **Medical Superintendent**



"Breast Cancer Awareness and Screening" - Need of the Hour

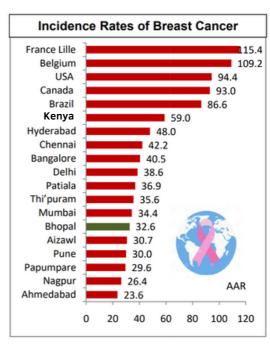
DR ATUL SHRIVASTAVA , STATE NODAL, MADHYA PRADESH CANCER REGISTRY PROGRAMME

Breast Cancer is the most common cancer among women worldwide, impacting millions of individuals each year. According to the International Agency for Research on Cancer (IARC), every year 2.3 million females are diagnosed with Breast Cancer in the world, making it the world's most prevalent cancer with highest Age Adjusted Incidence (AAR) in France followed by Belgium, USA, Canada, Brazil and Kenya.

As per the reports of the National Cancer Registry Program of India, Breast cancer is ranked number one cancer among Indian females. The age adjusted incidence rates of breast cancer was as high as 48.0 per 100,000 women for Hyderabad followed by Chennai, Bengaluru, Delhi, Thiruvananthapuram, Mumbai, Bhopal, Aizawl and Ahmedabad.

In India the incidence rates are significantly less than the western and American countries but the current trends point out that a higher proportion of the disease is occurring at a younger age in Indian women, as compared to the West. Over the last three decades all population-based cancer registries in India have shown a significant rising trend of incidence and death rates of Breast Cancer.

The increase in incidence and death rates are due to the change in risk factor profiles, higher cancer detection and improved cancer registration.



Age-Adjusted Incidence Rate (AAR) is a technique used to allow populations to be compared when the age profiles of the populations are quite different

A statistically significant increase in age-adjusted rate over time (1982-2014) i.e. Annual Percentage Change was observed in all the Indian cancer registries namely Bengaluru (annual percentage change): (2.84%), Barshi (1.87%), Bhopal (2.00%), Chennai (2.44%), Delhi (1.44%) and Mumbai (1.42%).

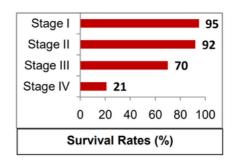
The risk factors of Breast Cancer include both the modifiable factors and non-modifiable factors. Modifiable factors include physical inactivity, obesity after menopause, taking hormone, reproductive history, use of tobacco and alcohol. Non-Modifiable risk factors include getting older, genetic mutations, reproductive history, having dense breasts, previous history of breast cancer or certain non-cancerous breast diseases, family history of breast or ovarian cancer and previous treatment with radiation therapy.

Approximately half of breast cancers develop in women who have no identifiable breast cancer risk factor other than gender (female) and age (over 40 years).

Understanding various aspects of the disease including its causes, risk factors, signs, symptoms, diagnosis, staging, treatment, prevention, are crucial for both patients and the health care community.

Treatment of breast cancer is complex and involves a combination of different modalities including surgery, radiotherapy, chemotherapy, hormonal therapy, or biological therapies delivered in diverse sequences.

As per an Indian study conducted in Southern India, the 5-year overall survival, was reported to be as high as 95% for stage I as low as 21% for stage IV patients. The survival rate of patients with breast cancer is poor in India as compared to Western countries due to earlier age at onset, late stage of disease at presentation, delayed initiation of definitive management and inadequate or fragmented treatment. According to the World Cancer Report 2020, the most efficient intervention for Breast Cancer control is early detection and rapid treatment.



To conclude, the burden of Breast Cancer is rising at a rate which is much higher than it was a decade ago. It is fast developing into a public health crisis, and society's reluctance to talk about women's bodies has made the situation even worse. To overcome these consequences, country needs better preparedness. The shortage infrastructural skilled manpower and requirements need to be met, and for this, the total healthcare budget of the country needs to be increased. In the jargon of the challenges of Breast Cancer control, prioritizing the adoption of better health awareness and availability of breast cancer screening programmes for early detection would go a long way. Creating a cadre of trained medical and paramedical professionals, efficient utilization and timely upgrading of skills of the existing healthcare workforce along with adopting new technologies would further facilitate in controlling the impact of Breast Cancer. Thus a robust awareness campaign and effective implementation of cancer screening programs are the need of the hour.

The Population Based Cancer Registry, Bhopal was established in the year 1985 under the National Cancer Registry Programme of India (ICMR). The State Cancer Registry Programme has now expanded to four hospital-based registries (HBCR) and one population-based registry (PBCR). The findings of the registry are released annually by ICMR and also the data of this registry has been published in Cancer Atlas in Five Continents, under the aegis of International Agency for Research on Cancer (IARC) (a part of WHO).

DID YOU

KNOW?

RARE, DEADLY NIPAH VIRUS

The deadly Nipah virus (NiV) has broken out again in Kerala. Nipah virus disease is an emerging zoonotic disease of public health importance in Southeast Asia and the Western Pacific Regions, where large fruit bats (Pteropus), the natural host of the virus, are widespread. NiV is an RNA virus belonging to the highly pathogenic Paramyxoviridae family and can be transmitted through direct contact with infected bats, infected pigs, or other infected people. In infected people, it causes a range of illnesses from asymptomatic (subclinical) infection to acute respiratory illness and fatal encephalitis.

PAST OUTBREAKS

NiV was first identified during an outbreak in Malaysia in 1998, and all subsequent outbreaks have occurred in parts of Asia (India, Bangladesh, Malaysia, and Singapore). In India, during 2001 and 2007 two outbreaks in humans were reported from West Bengal, neighbouring Bangladesh. The Nipah outbreak reported in Kozhikode and Malappuram districts of Kerala in May 2018 was the third Nipah Virus Outbreak in India and the first NiV outbreak in South India. Subsequently, two more outbreaks in Kerala were reported in Ernakulam in 2019 and in Kozhikode in 2021. Recently on September 2023, the fourth time the viral infection has been confirmed in Kozhikode, Kerala.

TRANSMISSION

Transmission of NiV to humans may occur after direct contact with infected bats, infected pigs, or from other Nipah virus-infected people. Two routes of transmission of the Nipah virus have also been identified from its natural reservoir to humans:

- (i) drinking of raw date palm sap contaminated with NiV and
- (ii) close physical contact with Nipah-infected patients. The person-to-person transmission may occur from close physical contact, especially by contact with body fluids

SIGNS AND SYMPTOMS

Human infections range from asymptomatic infection to acute respiratory infection (mild, severe), and fatal encephalitis. The incubation period is believed to range from 4 to 14 days. Infected people initially develop symptoms including fever, headaches, myalgia (muscle pain), vomiting and sore throat. This can be followed by dizziness, drowsiness, altered consciousness, and neurological signs that indicate acute encephalitis. In general, the case–fatality rate is estimated at 40–75%; however, this rate can vary by outbreak and can be up to 100%.

DIAGNOSIS AND TREATMENT

Laboratory diagnosis of a patient with a clinical history of NiV can be made during the acute and convalescent phases of the disease by using a combination of tests (RT-PCR and ELISA). NiV is classified as a Biological safety level 4 (BSL 4) pathogen. In India, a testing facility is available at the National Institute of Virology (NIV), Pune. Treatment: Currently there is no known treatment or vaccine available for either people or animals. However, Ribavirin, an antiviral may have a role in reducing mortality among patients with encephalitis caused by Nipah virus disease. Intensive supportive care with treatment of symptoms is the main approach to managing the infection in people

RESEARCH SNIPPETS

Title: TB drug stock planning in advance is a futile activity" health system's perceived and suggested solutions challenges pertaining to Nikshay Aushadhi portal in Central India.

Journal: Indian Journal of Tuberculosis. 2023.

Authors: Manju Toppo, Devendra Gour, Akash Ranjan Singh, Hemant Deepak Shewade, Keerthana S, Mugdha Kamble.

Department: Department of Community



Title: Study of Secondary Infections among Patients admitted in a COVID ICU of a Tertiary Care Centre in Central India.

Journal: Journal of Cardiovascular Disease Research, 14 (02), 2023.

Authors: Anurag Tiwari, Nitin Nahar, Arvind Kumar Mittal, Rakesh Shrivastav.

Department: Department of General Medicine & Department of Microbiology.

Title: To correlate clinical and biochemical profile of pleural effusion: a retrospective study in the tertiary care centre of Central India.

Journal: Indian Journal of Tuberculosis, 2023.

Authors: Hareesh Pathak, Sourabh Pandey, Lokendra Dave. Pooja Baradia, Nishant Srivastava.

Department: Department of Respiratory Medicine & Department of General Medicine

Background: The prevalence incidence and characteristics of secondary infection in patients infected with COVID-19 are not well understood and have been raised as an important knowledge gap. Besides the systemic effects of COVID-19 itself, the presence of secondary infections in such patients may have an adverse effect on the patient's outcome and duration of stay in the ICU. This study was hence planned to fill the knowledge gaps in regards to secondary infection in patients in COVID-19 ICU-their incidence, aetiology and effect on outcome.

Background: The National TB Elimination Programme (NTEP)

is facilitating sub-national certification of "TB Free" status with benchmarks at every 20% reduction in incidence from the

baseline of 2015. Drug consumption/sale is an essential

criterion to claim for the award. During the certification process

in 10 districts of Madhya Pradesh in 2022, it was found that

Nikshay Aushadhi (a web-based supply chain management

portal) entries were incomplete or vacant in most of the districts

and it was observed that quarterly drug requests were not sent

using Nikshay Aushadhi. Hence, the present study was

planned to explore the perceived challenges and suggested

Background: Pleural effusion indicates an imbalance between pleural fluid formation and removal. Classified into exudative and transudative, with common symptoms of dry cough, dyspnea and pleuritic chest pain. A confirmed etiology has to be established for effective treatment. Lack of tools for confirming diagnosis leads to diagnostic dilemma and delay in treatment initiation, leading to deterioration and untoward fatality in some cases. Our goal is early diagnosis by correlating clinical symptoms with biochemical profile and help initiate rapid treatment.



INVITING RESEARCH SNIPPETS

Abstract of the research published in indexed journals from the department/institution during the last month are invited for the publication in newsletter research snippets section

CLINICAL CORNER



INTERESTING CASE FROM DEPARTMENT OF ORTHOPAEDICS

CASE REPORT:

- A 22 year old female with low socio-economic status presented to our orthopaedic OPD
- C/O-insidious onset pain, mild swelling over the right shoulder, and some restrictions of shoulder joint movement over the last 10 years.
- No H/O significant trauma, cough, fever, or any other constitutional symptom O/E-right shoulder swelling with tenderness slightly warm to touch, firm-hard in consistency, covered with shiny and smooth skin and no pus discharging sinus with restricted ROM at right shoulder.





RADIOLOGICAL FINDINGS:

- X-RAY: X-ray (anteroposterior) of right shoulder - multiple subcutaneous and intramuscular swelling with multiple calcified areas.
- MRI: A large defined multilobulated T1 iso to hyperintense and T2/PD heterogenous hyperintense soft tissue lesion showing heterogenous post-contrast enhancement, diffuse restriction on DWI and fluid-filled levels in the subcutaneous and intramuscular plane of right shoulder involving deltoid muscle and multiple phleboliths.

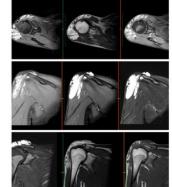
DIAGNOSIS:

- Based on clinical examination and radiological finding a diagnosis of "Hemangioma with multiple phleboliths" was made.
- The patient was planned for surgical intervention followed by radiotherapy.



The Department of Orthopaedics, GMC Bhopal, conducts advanced surgical procedures including complex limb reconstruction, complex joint replacement, spine surgery, pelviacetabular reconstruction, revision joint replacement etc. The department also runs Regional spinal injury and planning to start centre of excellence in orthopaedics very soon.





X RAY

MRI

LITERATURE:

- Hemangioma is a vascular malformation arising from endothelial tissue and is congenital in nature.
- Intramuscular hemangioma is only 1% of all hemangiomas.
- Phleboliths, also known as venous stones, are due to multiple calcifications of the thrombus in hemangiomas.
- MRI is the noninvasive investigation of choice for hemangioma.
- Treatment modalities include corticosteroid therapy, radiotherapy, Pulsed Dye Laser (PDL), Imiquimod, Embolisation, and sclerotherapy.
- The general consensus for the management of intramuscular hemangioma is not established. It can be individualized as per the case.

Submitted By Dr Rehan Khan (PG Student) Under the guidance of Dr Anurag Tiwari, Assistant Professor, Department of Orthopaedics, GMC Bhopal.

LOVE IS HOW YOU STAY ALIVE. EVEN AFTER YOU ARE GONE

The ultimate act of humanity - to live after death. Body donation is the informed and free act of giving one's whole body after death for medical education and research. The study of anatomy is impossible without cadaveric dissection, which hinges majorly on informed and consensual body donation. It is the foundation stone of all medical, research and scientific advancements in healthcare. The act of body donation makes it possible for scientists to achieve new milestones in the treatment of debilitating diseases which infect humanity. It is the ultimate selfless act, the ripple of butterfly wings that induces cascades of events which may yet save the world, and give life to thousands of people on earth.

We owe our past, present and future to people who altruistically donated their bodies for the evolution of humanity.

In their living memory; may their legacy outlast immortality.

Submitted by Tanishka Jain, 1 st year UG student, GMC Bhopal

सीख मिली है आपसे समाज को जगाने की वो हिम्मत दिखाने की अपना तन दान कर जो साहस दिखाया आपने वो दर पीढ़ी बढ़ने की।

आप खुद में ही शूरवीर समान हो है सम्मान आपके लिए अंतहृदय से शरीर देय की ये भावना से हम सबकी नज़र में आप हीरे समान है।

अंत में, शुक्रिया हम करते है आपका और माफ़ी अगर सम्मान में हम कही खोटे है आपके अंगदान महादान के सामने हम ज़िन्दगी भर आपसे छोटे हैं।

प्रेषक: उमंग गुप्ता (प्रथम वर्ष यूजी छात्र)

SAVE
LIVES TODAY

One Donor Can Save 8 Lives
Give the gift of life
Become an organ donor!

Register for Pledge

Take the pledge and mention GMC Bhopal as the Institution who motivated you to pledge



IMPORTANT HEALTH DAYS IN OCTOBER

Observed as	Day
Breast Cancer Awareness Month	Entire October
International Day for the Elderly/World	
Vegetarian Day	1st Oct
National Anti-Drug Addiction Day	2nd Oct
World Cerebral Palsy Day	6th Oct
World Sight Day	9th Oct
World Mental Health Day	10th Oct
World Arthritis Day	12th Oct
World Thrombosis Day	13th Oct
Global Hand Washing Day	15th Oct
World Anaesthesia Day	16th Oct
World Trauma Day	17th Oct
World Osteoporosis Day	20th Oct
World lodine Deficiency Day	21th Oct
World Polio Day	24th Oct
World Stroke Day	29th Oct

INSTITUTIONAL EVENTS



₹726 crore worth 2000 bedded hospital, OPD block and nursing college and hostels were inagurated on 28 August 2023



Celebration of International Week of the Deaf on 27 September 2023



CME cum workshop on Advance PFT on 23 September 2023



Onsite visit of DHR representatives to Multi-Disciplinary Research Units (MRU)

- Inauguration of State Newborn and Child Resource Center was inaugurated on 13 September 2023
- Hindi Diwas was celebrated at our institute on 14 September 2023

AWARDS AND HONORS









- Dr Akash Gupta, PG student (ENT) won first prize in the Otology poster competition in MPENTCON 2023.
- Dr Monika and Dr Gaurav PG students (ENT) won second place in the PG quiz competition in MPENTCON 2023.
- Dr Mukesh Kumar Jatav, PG student (Patho) won second place in the poster competition in **HEMOCONCLAVE 2023.**
- Dr Khushboo, PG student (Res. Med) won first prize in the state-level PG guiz competition in **NAPCON 2023.**



REVIEW ARTICLES

One page review article (max 500 words) on the topics of recent developments and health importance



RESEARCH HIGHLIGHTS

Abstract of the research work published in indexed journals from the department/ institution during the last six month



SIGNIFICANT MILESTONES

Recent awards/ fellowships / honors by

a recognized academic / scientific

societies, institutions or government

Any other significant achievements / milestones of department institution



CLINICAL CORNER

Interesting case presentations / newer procedures / clinical scenarios of our institution



DEATILS OF EVENTS

Details of events (conferences/ seminars/ symposia/ trainings/ workshops) conducted in the department/ institution of previous month and forthcoming events scheduled for subsequent months.



STUDENT'S CORNER

AWARDS & HONORS

organizations

Writings, poems and drawings are invited form UG/PG students only on the topics relevant to the medical





- Information should be sent by email along with the necessary supporting documentary
- Attach the photographs of the events and awards with good quality for reproduction in the
- Research publications should be sent along with the reprint and the institutional ethical approval
- The editorial board will shortlist the information sent for publication.

World Mental Health Day

October 10

World mental health day is an important health awareness event witnessed every year on 10 October to create awareness and promote the importance of mental health in one's life and society.

for more information Newsletter Section, Multi-Disciplinary Research Unit (MRU), 5th Floor, College building, GMC Bhopal.

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