INNOVATIONS IN HEMATOLOGY: SHAPING THE FUTURE OF DIAGNOSIS AND TREATMENT

HOLIDAY INN LUCKNOW AIRPORT, AN IHG HOTEL, UTTAR PRADESH, INDIA

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ICH KEEN TO EXPAND INTER-SOCIETY COLLAB

ICH ALREADY WORKING WITH ASSOCIATIONS LIKE FOGSI AND API

NDIAN College of Hematology, academic wing of Indian Society of Haematology and Blood Transfusion (ISHBT), is looking to expand inter-disciplinary collaboration through intensifying engagement with other societies.

ICH has worked with Association of Physicians of India, The Federation of Obstetric and Gynaecological Societies of India (FOGSI) and Academy of Pediatrics (AOP), said Prof RK Jena, ICH Secretary.

Dr Jyotirmay Paul and Dr Sekhar Chakraborty of API were instrumental in bonding with ISH-BT. Both societies have been sharing their platforms to showcase inter-disciplinary engagement. "We have taken a decision that we

are going to collaborate to have joint hematological malignancies CME workshops in different parts of the country in association with API," said Prof Jena.

One chapter in anemia guideline had lots of inputs from FOGSI representatives and the association was convinced that anemia pregnancy should be treated in particular line with involvement of hematologists.

"As physicians we stand witness to growing interface between hematology and general stream of medicine. API deeply values the inter-disciplinary collaboration for advance care and holistic approaches," said Dr Sanjay Tandon, Chairperson of Uttar Pradesh API.

Speaking on the occasion, Tuphan Kanti Dolai, ISHBT Secretary, said ICH had been focusing on Continuous Medical Education programme on the first day of conference during past to four to five years of conference and urged participants take advantage of it.

Prof Sarmila Chandra, President of ISHBT, congratulated the organisers for the theme of this conference which brought all innovations in hematology and people who practice medicine and diagnostic pathology under a platform. "These innovations are very important for hematologists and people at large. This has been our motto at ICH and ISHBT. It will spread hematology far and wide," said Dr. Chandra.

Prof SP Verma, Organising Secretary of Haematocon-2025, said the participation in the conference is very impressive. Presence of societies like API, FOGSI and AOP was heartening and the association grows strong, he said.





Haematocon 2025: A march towards shaping the future of hematology

HE gentle touch of November's winter must have greeted you warmly as you arrived in the historic city of Lucknow. The sight of familiar faces from the hematology fraternity only adds to that joy. In such a gathering of friends and colleagues, a formal welcome seems almost unnecessary. Yet, it gives me immense pleasure, as the Organising Secretary, to extend a heartfelt welcome to each one of you to Haematocon-2025, hosted by the Uttar Pradesh Hematology Group (UPHG) in the vibrant city of Lucknow at Hotel Holiday Inn.

This year marks a special milestone: The 66th Annual Conference of the Indian Society of Haematology and Blood Transfusion (ISHBT) and the first-ever ISHBT conference hosted under the aegis of UPHG. We extend a warm welcome to all our distinguished faculty members, delegates, and colleagues joining us for this grand event.

The Uttar Pradesh Hematology Group (UPHG), established in June 2023, is a rapidly growing, nongovernmental organization with over 200 members. Guided by eminent hematologists including Dr AK Tripathi, Dr Soniya Nityanand, Dr Sanjeev, Dr Rashmi Kushwaha and Dr Namrata Awasthi, UPHG strives to promote excellence in patientcare, research, and education in hematology across Uttar Pradesh and India.

UPHG focuses on both Clinical and Laboratory Hematology, working to advance understanding through research, collaboration, and innovation. Its academic initiatives, annual conferences, peripheral CMEs, workshops and training sessions serve as vital platforms for sharing knowledge and fostering professional growth.

The theme for Haematocon 2025 "Innovations in Hematology: Shaping the Future of Diagnosis and Treatment" beautifully captures the essence of our times. The insights and ideas exchanged here will, I am sure, inspire all of us to think boldly and work collectively towards a future of greater precision and hope.

Lucknow, our host city, embodies a rare harmony of tradition and progress. Once nurtured by the Nawabs of Awadh as a cradle of art and culture, today's Lucknow stands proudly at the crossroads of heritage and modernity. On behalf of the organizing committee, I thank you for your presence and participation. May your time at Haematocon 2025 be intellectually enriching, professionally rewarding, and personally memorable.







BULLETIN

6TH - 9TH NOVEMBER, 2025 ● HOLIDAY INN LUCKNOW AIRPORT, AN IHG HOTEL, UTTAR PRADESI











Showcasing our strides and excellence in hematology

CO-ORGANIZING SECRETARIES







DR RASHMI KUSHWAHA

DR NAMRATA P AWASTHI

DR ANSHUL GUPTA

Co organising secretaries

T gives us immense pleasure to extend a warm welcome to all delegates, speakers, and participants of Haematocon-2025, the annual flagship conference of the Indian Society of Haematology and Blood Transfusion (ISHBT). This year's conference represents yet another landmark in our collective pursuit of excellence in hematology and transfusion medicine.

Haematocon-2025 brings together around 25 international faculties and over 250 eminent national experts, offering an unparalleled academic experience that bridges global perspectives with India's growing clinical and research strengths. The conference serves as a dynamic platform for interaction between faculties and students, encouraging open dialogue, collaboration, and exchange of experiences across disciplines and generations.

As Co-Organising Secretaries, our focus has been on ensuring seamless coordination between scientific, academic, and logistic activities. From conceptualisation to execution, our teams have worked tirelessly to design a comprehensive scientific programme that combines state-of-the-art plenary sessions, focused symposia, interactive workshops, case-based discussions and didactic lectures covering the latest advances in hematology, hemato-oncology, coagulation disorders, molecular diagnostics, and transfusion medicine.

One of the core strengths of this conference lies in its emphasis on mentorship and experience sharing. We believe that direct interaction with senior academicians and international experts will inspire young hematologists to explore research frontiers and contribute meaningfully to patient-centred innovations.

We take this opportunity to express our deepest gratitude to the patrons, Organising Chairperson, Organising Secretary, the ISHBT Executive Committee, all faculty members, sponsors, volunteers, and delegates whose commitment and cooperation have made Haematocon-2025 a grand success.

We sincerely hope that this conference enriches your knowledge, broadens your perspectives, and strengthens professional bonds within the ever-expanding hematol-

MESSAGE



PROF TUPHAN KANTI DOLAI

A major step towards advancing and improving healthcare in India

Dear Delegates,

HOSE who have already arrived in Lucknow for Haematocon 2025 must have already experienced how this conference is a true amalgamation of brilliant and learned minds. Yet, it is with immense pleasure that I, on behalf of the Indian Society of Haematology and Blood Transfusion (ISHBT), welcome you to Haematocon 2025—the 66th Annual Conference of ISHBT, being held at Hotel Holiday Inn, from November 6th to 9th, 2025.

Our conference theme, 'Innovations in Hematology: Shaping the Future of Diagnosis and Treatment,' reflects our commitment to advancing the discipline and improving healthcare outcomes.

The exciting programme lined up, featuring keynote addresses, scientific talks, panel discussions, workshops, and oral or poster presentations creates an unique opportunity to acquire knowledge on evolving science of hematology.

Our distinguished international and national faculty will be sharing their expertise, offering valuable insights and opportunities for meaningful networking. The International Joint Symposiums with the American Society of Hematology (ASH) and the European Hematology Association (EHA) will open up new avenues to adopt the most advanced diagnostic and therapeutic approaches for hematological disorders in this part of the world.

Beyond these academic sessions, stimulating lectures, best paper presentations, and awards will recognize and encourage excellence in hematology. A highlight of this year's conference will be the National Hematology Quiz 2025, featuring post-graduate and postdoctoral students from across five zones of India. These teams have already demonstrated remarkable knowledge and passion for the subject, and we eagerly await their spirited competition in the national finals.

I once again extend my heartfelt gratitude to the organizing team whose tireless efforts have made this conference possible. Their dedication has shaped Haematocon 2025 into not just an academic gathering but a celebration of ideas, collaboration, and camaraderie.

I warmly welcome all delegates to Haematocon 2025, and I look forward to an inspiring and enriching exchange of knowledge and experiences with each one of you.







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Academics is the backbone of any society: ICH

NDIAN College of Hematology, academic wing of Indian Society of Haematology and Blood Transfusion (ISHBT), is working on guidelines pertaining to number of hematological disorders

While ICH guidelines on Anemia and Sickle Cell Disease have been published, the book on Thalassaemia will be released during current Haematocon-2025. Besides, aplastic anemia, immune thrombocytopenia (ITP), hemophilia and stem cell and cellular therapy guidelines are in different phases of preparation.

"ICH has done a tremendous job in bringing out guidelines in important areas in thalassemia, sickle cell disease and nutritional anemia. Academics is the backbone of any society and ICH was founded on this premise. The guidelines are reflections of the efforts matology," said Prof HP Pati, dean of



ICH, at the academic council meeting of been completed while two more will ICH during ongoing Haematocon-2025. Presenting ICH's annual activities-2025, Prof Jena emaphasised on collaboration Prof RK Jena, ICH Secretary said ICH with ICH and other Association of Physiwas focussed on organising Continucians of India, The Federation of Obstetous Medical Education programme ric and Gynaecological Societies of India across India. Eight out of 10 CMEs had (FOGSI) and Academy of Pediatrics (AOP).

came practically functional from Haematocon 2022 at Kolkata. The primary objective of ICH was to reach every part be organised in Berhampur and Delhi.

of India to develop and create awareness regarding hematology starting from policymakers to physicians and from laboratory technicians to people at large, ICH received six nominations for fellowship for the year 2025. Zonal council members Prof AK Tripathi and Prof Vijai Tilak also gave their valuable advices at the academic council meeting

advocacy have brought about massive

changes in perceptions towards hema

ISHBT Sarmila Chandra and ISH BT Secretary Tuphan Kanti Dolai also

stressed on the need for strengthening

Haematocon 2019 at New Delhi and be

ICH was officially created during

collaboration with other societies.









Greater collaboration sought between ISHBT and EHA



NDIAN Society of Haematology and Blood Transfusion (ISHBT) and European Hematology Association have decided to strengthen their collaboration through online joint masterclass programme and greater interactions between

In a virtual meeting held between ISHBT and EHA during Haematocon 2025 in Lucknow on November 6, emphasis was given on greater intellectual and academic exchanges with leadership of two societies agreeing to share programme schedules well in advance to accommodate each other.

The EHA assured to consider creating windows to ISHBT's scientific programmes and joint symposiums in its 2027 annual plans so that greater cooperation could be established.

"It has been a very fruitful cooperation between two societies. We would like to develop it further. Hurdles must be cleared as soon as possible. EHA can go through ISHBT's activity list and take further decision," said Dr Sarmila Chandra, President of ISHBT. "ISHBT wishes to continuation of HOPE Asia, ISHBT-EHA tutorials and ISHBT-EHA masterclass programmes. Besides, invitation to ISHBT professionals well in advance so that they could prepare their scientific papers and plan out their joining the symposiums," said Prof Tuphan Kanti Dolai, General

Responding to ISHBT's proposal, EHA representative said, "EHA faces difficulties in sending experts physically for these programmes. Instead, virtual hubs could be created for discussions on scientific deliberations soon after EHA Congress," Reflecting upon the ISHBT-EHA association, Prof RK Jena, Secretary of Indian College of Hematology, said there was scope for improving relations between two hematological

"The relation between ISHBT and EHA started almost 14 years ago. It progressed very smoothly. It continued five to six vears. Thereafter there was sudden dip in activities. ISHBT understands the busy schedule of EHA. On our part our activities have also grown exponentially. We also need to accommodate you as per your availability," Prof Jena pointed out.

Prof Rajib De, treasurer of ISHBT, said, "the joint masterclass programmes need to be more frequent." Prof HP Pati, Dean of Indian College of Hematology, also spoke.







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Obstetric DIC: From the obstetrician's perspective

Obstetrics & Gynaecology,

KGMU, Lucknow

ISSEMINATED Intravascular Coagulation (DIC) is a life-threatening haematological emergency frequently encountered in obstetric practice. It represents a secondary manifestation of an underlying obstetric catastrophe that triggers widespread activation of coagulation pathways, leading to consumption of clotting factors and platelets, and subsequent bleeding dia-

thesis.

From an obstetrician's perspective, DIC most commonly complicates conditions such as abruptio placentae, amniotic

abruptio placentae, amniotic fluid embolism, severe pre-eclampsia/eclampsia, HELLP syndrome, intrauterine foetal demise, and sepsis.

DIC can be broadly classified into acute and chronic types. Acute DIC, the form most often seen in obstetrics, is characterized by sudden and overwhelming activation of coagulation, resulting in rapid consumption of platelets and clotting factors, and leading to severe bleeding. Chronic DIC, in contrast, develops slowly when the balance between coagulation and fibrinolysis is partially maintained; it is rare in pregnancy and may occur in conditions like retained dead foetus syndrome or certain malignancies.

The hallmark of obstetric DIC is its acute and rapidly progressive course, often coinciding with massive haemorrhage. Early recognition and mul-

tidisciplinary management are crucial. Obstetricspecific DIC scoring systems, such as the modified ISTH or Japanese Society of Thrombosis and Haemostasis (JSTH) obstetric DIC score, have been developed to account for physiological changes in pregnancy, where fibrinogen levels are naturally elevated. These scoring systems use platelet count,

fibrinogen, prothrombin time, and clinical parameters to identify early coagulopathy before overt bleeding develops, enabling prompt and targeted

At present the JSTH Obstetric DIC score is the most sensi-

tive and practical tool for early diagnosis of DIC in pregnancy, and should ideally be adopted in tertiary care and high-risk obstetric centres to guide timely management and reduce maternal morbidity and mortality. Management principles include immediate treatment of the underlying cause, aggressive volume resuscitation, and component therapy guided by laboratory results. Fresh frozen plasma, cryoprecipitate, platelet concentrates, and packed red cells are administered in balanced ratios to restore haemostasis. Uterotonic agents and timely surgical interventions may be necessary for source control.

interventions may be necessary for source control. In the Indian context, tertiary care centres should maintain DIC management protocols, rapid access to blood products, and simulation-based training for

At present the JSTH Obstetric DIC score is the most sensitive and practical tool for early diagnosis of DIC



DR BONTHA V. BABU

Senior Scientist at the Indian Council of Medical Research (ICMR)

Indian Stigma Scale for Sickle Cell Disease: Validation and way forward

ickle cell disease (SCD) continues to pose a serious clinical and social challenge in India, particularly among tribal and marginalized communities where access to comprehensive care remains limited. Beyond its physical burden, stigma associated with SCD deeply affects treatment adherence, psychological well-being, and social participation.

Recognizing the absence of a culturally appropriate tool to measure this dimension, the Indian Council of Medical Research (ICMR) undertook the development and validation of the ICMR Sickle Cell Disease Stigma Scale for India (ISSSI) – the first standardized instrument of its kind for the Indian context.

The conceptual framework and psychometric validation of the ISSSI, conducted among more than 590 patients and caregivers across six high-burden districts have been outlined. The scale demonstrated robust reliability and validity, capturing five key domains of stigma among patients and four among caregivers. It is now available for both community and clinical use and validated for tribal and rural settings.

The ICMR has initiated special intervention and strategies for stigma-reductiontion, grounded in a theory of change and implementation research framework. This multi-component program integrates healthcare provider training, community sensitization, counselling, and peer support to address stigma at patient, family, and community levels.

Preliminary findings suggest that reducing stigma can enhance treatment adherence, improve quality of life, and strengthen trust in the health system. The discussion emphasized how stigma screening can be integrated within the National Sickle Cell Anaemia Elimination Mission and routine SCD services.

The key message is clear — every clinical encounter offers an opportunity not only to treat pain, but also to reduce the pain of stigma. Moving forward, the focus will shift from measurement to impact – translating stigma insights into improved care, community empowerment, and equitable health policies.





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BONE MARROW ASPIRATION & BIOPSY

HE Haematocon 2025 featured a focused workshop on "Bone Marrow Aspiration and Biopsy: A Comprehensive Approach," held at the Department of Pathology, King George's Medical University on 6th November. The workshop was coordinated by Prof Tejinder Singh and Prof Mili Jain, eminent experts in the field. Faculty members included Prof Priya Murthy from Sparsh Hospital Bengaluru, Prof Prerna Arora from Maulana Azad Medical College New Delhi and Prof Neha Singh from AllMS Rishikesh. The workshop comprehensively covered the techniques of marrow examination along with practical discussions and detailing of spectrum of erythroid, lymphoproliferative, myeloproliferative, metastatic and plasma cell disorders. Benign entities including infections, phagocytic disorders, marrow failure, osteopathies and role of immunohistochemistry in bone marrow were also eloquently detailed. Nearly 35 participants took part in the workshop.



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LOW CYTOMETRY

Workshop on 'Flow Cytometry: Immunophenotyping of Acute and Chronic Lymphoproliferative Disorders' was successfully organised to enhance participants' knowledge and technical proficiency in the use of flow cytometry for hematolymphoid malignancies. Dr Geeta Yadav. Dr Khaliqur Rahman, Dr Shilpi More, Dr Sujata Rai Chaudhari conducted the session which included live case demonstrations. The experts demonstrated the immunophenotyping of acute leukemia and chronic lymphoproliferative disorders (CLPD), integrating clinical, morphological, and immunophenotypic findings in an interactive and instructive format. Dr Nupur Das deliberated on the clinical applications of flow cytometry, highlighting its expanding role in disease monitoring, minimal residual disease (MRD) detection, and guiding targeted therapy. Among others Mr Hirendra was present. The workshop provided an excellent platform for learning, discussion, and skill enhancement in the field of diagnostic hematopathology.



ADVANCED CYTOGENETICS

HE Haematocon 2025 Advanced Cytogenetics Workshop at King George's Medical University marked an important milestone in the regional haematology community, gathering preeminent clinicians, scientists, and diagnostic experts to explore novel breakthroughs and practical approaches in cytogenetic diagnostics. Under the coordination of Dr Nitu Nigam and Dr Vimala Venkatesh. The day-long program featured a focused agenda on 'Innovations in Haematology: Shaping the Future of Diagnosis and Treatment', specifically highlighting advanced karyotyping and FISH techniques. Distinguished faculty such as Dr Dhanlaxmi L Shetty, Dr Mayur Parihar, and Lt Col Dr Barun Kumar Chakrabarty led foundational lectures and practical demonstrations. Participants benefitted from hands-on sessions covering every stage of the cytogenetic workflow—cell preparation, probe selection, DNA denaturation, fluorescence microscopy, and result interpretation, all tailored to provide attendees with actionable expertise.



HEMOGLOBINOPATHY DIAGNOSIS

HE workshop on 'Hemoglobinopathy Diagnosis' at Department of Dr Ram Manohar Lohia Institute of Medical Sciences, Lucknow, coordinated by the Joint Organizing Secretary of Haematocon 2025 Prof Namrata P Awasthi brought together distinguished faculty and enthusiastic participants from across the country. Hemoglobinopathy workshop provided insights on clinical and lab approach to diagnosis of Hemoglobin disorders and hands-on exposure to diagnostic modalities, including HPLC and molecular techniques, led by experts Dr Nita Radhakrishnan, Dr Mrinalini Kotru, Dr Ruchi Gupta, Dr Prashant Sharma and Dr Khushnooma Italia . The workshop was aimed to create a focused learning platform bringing together expert faculty, practicing pathologists and students to understand the diagnostic nuances related to Hemoglobinopathies.



AI IN HEMATOLOGY

workshop on Al in Hematology was held at King George's Medical University during Haematocon-2025. Hematology is one of the most data-rich and visually intensive branches of laboratory medicine. From peripheral smear morphology and bone marrow histology to flow cytometry and genomic profiling, each diagnostic step generates complex, multidimensional data. The emergence of artificial intelligence (Al) and machine learning (ML) provides an unprecedented opportunity to automate, integrate, and interpret these diverse data sources, bridging morphology, cytogenetics, and molecular analytics into cohesive decision-support systems. Early narrative and systematic reviews have outlined Al's transformative potential in hematology, encompassing both clinical prediction and laboratory diagnostics. In hematology, machine learning (ML) algorithms such as support vector machines, random forests, and gradient boosting models have been applied to large structured datasets, while deep learning (DL) techniques, including convolutional and recurrent neural networks, are employed.

DIAGNOSIS OF BLEEDING DISORDERS

workshop on 'Diagnosis of Bleeding disorders, was conducted at Department of Pathology, King George's Medical University on 6th November. This workshop was moderated by expert national faculty Dr Sukesh Chandran Nair from CMC Vellore, Dr Rashmi Kushwaha King George's Medical University, and Dr Dinesh Chandra, Sanjay Gandhi Post Graduate institute of Medical Sciences. Around 20 participants from across India participated in this workshop. This workshop aimed to strengthen the diagnostic acumen of young hematologists, pathologists, and laboratory professionals in evaluating patients presenting with bleeding manifestations an area that continues to pose significant clinical and laboratory challenges. Participants gained practical exposure to tests such as Prothrombin Time (PT), Activated Partial Thromboplastin Time (APTT), mixing studies, factor assays and inhibitor screen. Emphasis was placed on case-based learning and interpretation of real-world data to bridge the gap between lab and clinical decision-making.









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Integrated laboratory reporting, bench to bedside

D, Former Prof of Hematology,

HERE is an exponential improvement in diagnostic tests in last few decades, particularly in cancer diagnosis. Overall cancer management has improved due to labbased risk stratification with appropriate

Biomedical clinical informatics presently limited to lab information system (LIS), and electronic health records need updation to cope with the need of the time. LIS is presently just

uploading reports from differ ent labs without any composite interpretation or

A lymphoma patient for example, would have reports from peripheral blood, bone marrow aspiration, and biopsy, flow cytometry, IHC, cytogenetics, FISH, PCR/ NGS and many are from different independent labs. There would be likely contradictions and needs to be integrated. Integrated reporting is composite IT generated report of one episode relevant to cancer patients management. It will harmonize the different reports from all relevant labs with easily interpretative comments without any ambiguity

In every specialised centre/referal cancer hospital, there is need to establish a Specialist-integrated Hematological Malignancy Diagnostic Services and

headed by a hematopathologist to integrate and maintain quality of the tests. Even tests done outside

Bench to bedside represents a crucial step in ensuring that the knowledge gained from lab to be

applied in health practice. In a case of suspected AML with 17 blasts with NPM1 mutation. the integrated diagnosis would be AML despite less than 20 blasts with favorable prognosis and treatment would be as AML. A lymphoma with DLBCL

morphology and FISH showing MYC and BCL2 re arrangement, integrated diagnosis is high grade B-NHL and needs more intensive treatment adding etoposide or doxorubicin. A patient with hypocel lular marrow with less than 10 blasts, cytogenetics showing complex karyotype and NGS with biallelic TP53 mutation, integrated diagnosis is "TP53- mutated myeloid neoplasm(ICC 2022)" with adverse prognosis and stem cell transportation is strongly

An ideal integrated report will have a integrated diagnosis, harmonize conflicting signals, identify risks and actionable information and recommended follow-up. Integrated reporting improve diagnosis, accuracy, risk analysis and reduce cost of overall cancer management.

Bench to beda crucial step ir ensuring that the knowledg gained from lab



Neonatal Anemia: A difficult and a problematic entity

EONATAL anemia is defined as a reduction in the hemoglobin concentration below the normal range for age typically less than 13 g/dL in term infants and less than 12 g/dL in preterm infants. It is a relatively common condition, affecting approximately 25–30% of neonates in intensive care units, with higher prevalence in preterm and low-birth-weight infants due to frequent blood sampling and immature erythropoiesis.

The causes of neonatal anaemia can be broadly categorised into blood loss, increased red blood cell destruction, and decreased red blood cell production. Blood loss may result from fetomaternal haemorrhage, which occurs in about 1–2% of pregnancies, or from iatrogenic causes such as repeated blood draws in the NICU. Hemolytic causes include Rh incompatibility (present in 0.1–0.3% of live births) and ABO incompatibility (occurring in 1–3% of live births), which leads to immune-mediated destruction of red blood cells. Non-immune causes include hereditary spherocytosis, G6PD deficiency, and congenital infections like cytomegalovirus or parvovirus B19. Decreased red cell production may be congenital, as in Diamond–Blackfan anemia, or physiologic, where hemoglobin normally falls to around 10–11 g/ dL by 8–12 weeks of age due to reduced erythropoietin levels after birth.

Clinically, neonates may show pallor, tachycardia, poor feeding, lethargy, or jaundice depending on the cause and severity. Diagnosis involves a complete blood count, reticulocyte count, Coombs test, bilirubin levels, and peripheral smear examination. Neonates in whom a hereditary hemolytic anaemia is suspected require additional laboratory testing, such as a G6PD assay, Osmotic fragility testing and flowcytometry for spherocytosis, among others.

Treatment of neonates with anemia varies from simple observation and iron or erythropoietin therapy in mild cases to packed redblood cell transfusions (10-20 mL/kg) in severe anemia. Restrictive transfusion strategy is advocated for the management of neonatal anemia, wherein RBC transfusion is performed only when the degree of anemia causes symptoms or compromises oxygen delivery. Preventive strategies, including delayed cord clamping (30–60 seconds) and minimizing jatrogenic blood loss, play an essential role in reducing the incidence of neonatal anemia, especially in vulnerable pre-









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Geriatric Anemia – A public health crisis in hematology

Dept of Pathology, IMS, BHU, Varanasi

ERIATRIC anemia is a public health crisis in hematology. It is a public health problem because more than 164 million elderly who constitute approximately 24% of the world opulation are suffering from anemia

globally. It is a crisis because it increases the mortality by 40%. India is soon going to have the second largest number of elderly in the world. One in every Geriatric anemia is therefore a disaster in slow motion, a tick-

It is a unique anemia because diagnosis poses a challenge. Anemia may masquerade as dementia. There is male preponderance. Etiology is quite different from adults. Multiple myeloma, MDS & unexplained anemias in the elderly are entities that are found more frequently/exclusively in elderly. Vitamin B12 deficiency is difficult to detect in elderly.

Approach to Geriatric anemia entails four steps. Take a good history and a thorough physical examination to arrive at a clinical diagnosis. Use the MCV in the backdrop of histogram, clinical examination findings, peripheral blood smear findings & remaining CBC to narrow differential diagnosis & determine initial tests. Carefully evaluate the need for bone marrow examination, if this will alter the course of treatment. Avoid the indiscriminate use of erythropoietin for mild anemia, as it is exceedingly expen-

sive and questions regarding its safety are raised. The present recommendation is that geriatric anemia should be evaluated but the anemia itself should not be treated unless the patient is severely symptomati or in danger of needing a transfusion(Hb≤ 10 g/dL).

A hospital-based study on geriatric anemia in & around Varanasi over a period of eight-and-half years (from December 2011 to January 2021) in 419 patients revealed that 10% of patients had mild anemia and in 76.47% of the cases of mild anemia, there was an underlying hematological malignancy (multiplemyeloma, CLL, CML & MDS). Therefore mild anemia is not a mild condition in the elderly as it may be a harbinger of a serious underlying problem. For every one gram fall in hemoglobin, there is a 22% increased risk of falls. Falls are responsible for ≥90% of hip bone fractures.

masquerade as dementia. Etiology is quite adults. Multiple mveloma. MDS & unexplained anemias in the elderly are entities that are found more frequently/ exclusively in



Role of CAR-T cell therapy in pediatric ALL

► HIMERIC Antigen Receptor T-cell (CAR-T) therapy marks a revolutionary step in personalized cancer treatment, → harnessing a patient's immune system to selectively destroy malignant cells. In pediatric Acute Lymphoblastic Leukemia (ALL), it has transformed the outlook for relapsed and refractory cases once considered beyond cure.

The foundation of CAR-T therapy was laid in 1987 when Zelig Eshhar developed the first chimeric receptor. The first clinical success came in 2010 with follicular lymphoma, and in 2017 the U.S. FDA approved Tisagenlecleucel (Kymriah), the first commercial CAR-T

CAR-T cells are genetically engineered T-cells bearing synthetic receptors that combine an antibody-derived targeting domain, commonly against CD19, with intracellular signaling molecules such as CD3 and co-stimulatory domains like CD28 or 4-1BB. These modifications empower the T-cells to recognize, attack, and remember tumor cells, ensuring sustained remission.

Clinical trials have produced encouraging outcomes. The landmark ELIANA trial showed an 81% overall response and 90% six-month survival in pediatric and young adult B-ALL, with most patients achieving minimal residual disease negativity. Long-term remissions of 60-70% have been observed, often without the need for bone marrow transplantation. CAR-T cells also persist in the central nervous system, reducing relapse rates in CNS-positive cases. Toxicities, mainly Cytokine Release Syndrome (CRS) and neurotoxicity (ICANS), are now well managed with tocilizumab, corticosteroids, and standardized ASTCT guidelines. A coordinated multidisciplinary approach, encompassing hematologists, ICU physicians, nurses, and pharmacists, is vital for early recognition, infection prevention, and supportive care.

India achieved a landmark in 2023 with NexCAR19, the country's first indigenous CAR-T therapy developed jointly by IIT Bombay and Tata Memorial Centre in collaboration with the U.S. National Cancer Institute. NexCAR19 demonstrated a 67% overall response and around 50% complete remission, costing nearly one-eighth of Western therapies, making it far more accessible.

With research now advancing toward next-generation CAR-T constructs targeting new antigens like CD7 and incorporating safer, more efficient designs, the therapy's future looks bright. CAR-T has redefined pediatric leukemia care.



MIEISISIAIGIE 📵



PROF VIJAI TILAK Organizing Chairperson, Haematocon-2025

Renewing the shared spirit that binds the fraternity

Ta time when hematology is passing through a fascinating evolutionary phase, the 66th annual conference of the Indian Society of Haematology & Blood Transfusion (Haematocon 2025) brings together hematologists from across India and around the world in the historic city of Lucknow.

Haematocon 2025 is much more than a congregation of experts attending workshops or lectures by stalwarts, it is a satsang of the wise and the learned, an opportunity to exchange ideas, build collaborations, and renew the shared spirit of discovery that binds the medical fraternity.

The conference holds special significance for young hematologists who are setting out to chart their own professional journey dedicated to the wellbeing of society. Spanning four enriching days, every technical session—if attended with sincere engagement—promises to offer insights and experiences that will stay with you for a lifetime.

Hematology today stands at an exciting crossroads. On the clinical side, targeted therapies and personalized medicine are transforming the landscape, leading to remarkable reductions in mortality and morbidity. On the laboratory front, precision diagnostic tools are helping hematopathologists make faster, more accurate diagnoses, directly translating into better patient outcomes.

With artificial intelligence now making its presence felt, the future promises even more precision and potential. Yet, this evolving field demands one thing above all $-\ a$ resolute commitment to lifelong learning. Haematocon 2025 provides the perfect platform to nurture that learning and stay at the forefront of progress.

The conference venue—Hotel Holiday Inn, nestled away from the hum and bustle of the city—offers the ideal setting for reflection, collaboration, and camaraderie. The gentle pink weather of November in Lucknow adds its own charm, making this not just an academic meeting but a memorable human experience. Team Haematocon has worked tirelessly to ensure that every delegate feels at home and that the faculty enjoys a comfortable and enriching stay.

On behalf of the Organising Team, I warmly welcome you to the "City of Nawabs"—a city known for its tehzeeb, mehmaan nawazi, timeless history, culture, and delectable Awadhi cuisine. May Haematocon 2025 inspire learning, spark collaborations, and foster friendships that last a lifetime.

ICH: A breakthrough journey so far...

EMATOLOGICAL diseases—benign (like anemia, sickle cell disease, and thalassemia) and malignant (including leukemias, lymphomas, and myeloma)—pose major health challenges in India, creating a heavy socioeconomic burden. Rapid progress in diagnosis, stem cell transplantation, and cellular therapy has transformed the field, compelling hematologists to constantly upgrade their skills and adapt to evolving standards of care.

Each year, nearly 100 new hematologists qualify, reflecting the fast expansion of hematology departments, laboratories, bone marrow transplant units, and cellular therapy centers across the country. This growth significantly broadened the role of the Indian Society of Hematology and Blood Transfusion (ISHBT).

The concept of an Indian College of Haematology (ICH)—as the academic wing of ISHBT—was first proposed during the 3rd Global Congress on Sickle Cell Disease in Bhubaneswar (2017) and formally approved at Haematocon 2019, Delhi. ICH was envisioned as a national platform to advance education, training, and research in hematology, while promoting equitable healthcare access across India.

ICH is committed to: (a)Standardizing hema-



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Secretary,
India College of

tology education and training. (b) Establishing evidence-based diagnostic and treatment protocols. (c) Promoting research, innovation, and academic collaboration. (d) Advising national bodies such as NMC and NBE on postgraduate education. (e) Developing national disease databases to guide policy and patient care. (f) Framing Indian-context guidelines, consensus documents, and study groups.

ICH has prepared disease-specific national guidelines on Sickle Cell Disease, Anemia, and Thalassemia, widely appreciated by professionals and policymakers. The ICH–Indian College of Physicians Manual of Hematological Malignancies was released at APICON 2023, Delhi.

Guidelines on Hemophilia, Aplastic Anemia, Myeloid Leukemias, ITP, and Stem Cell Transplantation/CAR-T Therapy are underway. ICH has also partnered with professional bodies such as API and FOGSI, hosting joint academic sessions at major conferences. A new milestone—the Asian Joint Session during Haematocon 2025—marks the beginning of regional cooperation in hematology.

Through teamwork and vision, ICH continues to shape the academic and clinical landscape of hematology in India.

Long Live ICH!

ISHBT: The torchbearer of excellence

OUNDED five decades ago by pioneers committed to promoting excellence in patient care, research, and education in clinical and laboratory haematology as well as transfusion medicine, the Indian Society of Haematology and Blood Transfusion (ISHBT) has been a torchbearer in advancing the science and practice of haematology in India.

Over the years, haematology has undergone a remarkable transformation. The field has expanded to include genetic medicine, molecular biology, and immunology, deepening our understanding of blood disorders. Treatments, once limited and generalized, are now becoming precise, targeted, and technology-driven. Stem cell transplantation, CAR-T cell therapy, gene therapy, and gene editing are no longer distant possibilities but accessible realities for many patients.

ISHBT has not only helped build institutions of excellence but also taken knowledge to every corner of the country. Through conferences, workshops, updates, and symposia, the society has ensured that doctors from both big and small urban centres remain abreast of the latest advances. Its collaborations with the American and European Societies of Haematology have opened



DR SARMILA CHANDRA President ISHBT

doors for global exchange of research and ideas.

The Indian College of Haematology, the academic arm of ISHBT, continues to guide policy, frame treatment guidelines, and support promising researchers through fellowships. The Indian Journal of Haematology and Blood Transfusion further nurtures scientific aspirations at home and abroad. Yet, challenges remain. Haematology services are still concentrated in metro cities, and there is a shortage of trained specialists in smaller towns and medical colleges. Infrastructure for blood banks and advanced treatments remains uneven. Recognising this, ISHBT is determined to take haematology beyond the urban centres—to build capacity, standardise knowledge, and make care accessible across India.

Our roadmap includes continuing established academic activities, expanding outreach to smaller cities, creating teaching modules for medical students, completing treatment guidelines, and setting up a central library accessible to all members.

I thank you sincerely for entrusting me with this responsibility. Together, we can make ISHBT an even more vibrant, democratic, and inclusive organisation, one that carries the light of haematology to every corner of our country.





