

From Prevention to Cure – AIIMS Nagpur provides special services for patients with Sickle cell anemia

In his constant endeavor to provide solutions to regional health challenges, Director AIIMS Nagpur has declared special services for patients with sickle cell anemia at AIIMS Nagpur. Inaugurating the Sickle cell Anemia services on 8th July, at OPD complex, **Director Prashant P Joshi** said that considering its position as an Institute of National Importance, AIIMS Nagpur is well poised to provide world class facilities for patients with sickle cell anemia, through a series of interventions ranging from prevention and treatment, to cure. A special registration counter has been designated to allow patients with sickle cell anemia stamp their visits for OPD consultation without any waiting period. The electronic queue management system of the hospital has been improvised to prioritise consultation for sickle cell anemia at the respective speciality OPD. A special clinic at OPD has been established for free dispensation of special medicines and vaccines during OPD hours. Special beds have been allocated for indoor treatment and emergency management, so that no patient with sickle cell anemia be denied treatment due to lack of availability of beds.

The National Sickle Cell Anaemia Elimination Mission was launched by Hon'ble Prime Minister in 2023. Aligning with the National Health Mission's (NHM) objective to eliminate sickle cell genetic transmission by the year 2047, AIIMS Nagpur has a long-term commitment to eradicating the disease. Soon after joining as Director AIIMS Nagpur in April 2024, **Dr Prashant Joshi** has made Sickle Cell Anemia a top priority and has taken several executive decisions to facilitate development of Center of Excellence for Sickle Cell Anemia.

The Pathology department is already well equipped to conduct High Performance Liquid Chromatography for diagnosis of sickle cell anemia and its molecular pathology division will soon be equipped to perform next generation sequencing, sanger sequencing and PCR for sickle cell gene and HLA matching. **Dr Rasika Gadkari, Professor & Head**, department of Pathology has stated that all efforts are being made to incorporate cutting technology in the diagnostic arena for sickle cell anemia within the institute.

The Transfusion Medicine department, which provides blood components with advanced processing facilities will soon include irradiation and leukofiltration of blood components. The department also provides comprehensive apheresis services, including red cell exchange essential for managing dreaded vasoocclusive crises and strokes. Hematopoietic stem cell collection and cryopreservation, crucial for supporting bone marrow transplantation among sickle cell patients is also available. **Dr Vishvdeep Khushoo, Medical Hematologist** with vast experience in bone marrow transplant for hemoglobinopathies, has worked hard to make the transplant unit fully functional under the constant guidance and encouragement of the Executive Director, Dr Prashant P Joshi. The transplant unit is well supported by diagnostic facilities from Dept of Microbiology for viral studies and Department of Biochemistry for drug levels required for post transplant care and monitoring.

Prenatal diagnosis for sickle cell anemia by amniocentesis and chorionic villous biopsy will be done free of cost to couples who are sickle cell trait, during first 3 months and 16-20

weeks of pregnancy. **Pretest genetic counselling** is given before the sample is sent for molecular testing, and depending upon the result doctors also perform post-test counselling to help couples make decisions on continuation of pregnancy. Newborn screening will be offered to all babies and those testing positives will be provided anticipatory guidance and treatment. A special OPD will be conducted for premarital counselling and regular targeted outreach programmes for community awareness and screening have been planned.

To ensure that the institute's commitment aligns with the national and state vision of eliminating sickle cell disease by 2047, a special committee of faculty experts including **Dr Meenakshi Girish** [Professor & Head, Pediatrics], **Dr Amol Dubey** [Asso. Professor, Medicine], **Dr Vishvdeep Khushoo** [Asst Professor, Medical Hematology], **Dr Richa Juneja** [Asso. Professor, Pathology], **Dr Nitin Marathe** [Asso. Professor, Hospital Administration], **Dr Medha Daville** [Asso. Professor, ObGy], **Dr Meena Mishra** [Professor & Head, Microbiology], **Dr Amol Dongre** [Addl Professor, Community Medicine], **Dr Akash Bang** [Addl Professor, Pediatrics], **Dr Manish Shrigiriwar**, M.S and **Mr Vijay Nayak** [Deputy Director, Admin] have been appointed by the Executive Director, with the additional mandate to establish research collaborations for sickle cell anemia with national and international bodies.