

First-ever Haplo-identical bone marrow transplant in India

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Chennai: The youngest stem-cell recipient from India and the couple's second treated child, who was diagnosed with Acute Myeloid Leukemia (AML) at the age of seven.

The boy underwent treatment for eight months at the Regional Cancer Centre, Thiruvananthapuram, and was normal for two and half years, before he suffered a relapse. The doctor noted the couple, who had three daughters living in Tamil Nadu, that a bone marrow transplant was the only way to save their son's life.

Confronted by their economic situation, the couple began to search for volunteer to look at the various treatments available for their son and finally arrived to use the bone marrow transplant facility available at MDTT Hospital, Chennai. "We sought help and had realized a couple of AML," Dr Chakrabarty, haematologist and haematology-oncologist, MDTT, recalled.

An allogeneic transplant in which the stem cells of a donor are used, had to be ruled out in the absence of a genetic match. "The biggest challenge in bone marrow trans-



At the new centre for Bone Marrow Transplants.

plants in India is finding matching donors," another expert for Chennai Institute pointed out. "We have genetic patients in India waiting for a matching donor."

"The doctors treated our daughter's stem cells but they did not match our son's," the parents recalled. "There is only a 10 per cent chance of a sibling's stem cells matching that of the patient," Dr Chakrabarty added.

Thus, in a first ever attempt in the country, the experts decided to perform a Haplo-identical bone marrow transplant on the boy - with a 50 per cent matching donor who could be either of

his parents. In this case the mother. "The challenge is to make the parent not match with and look into your own child," Dr Chakrabarty said.

The transplant was procedurally intra-umbilical, after followed by cleaning of the bone marrow, irradiating it inactively to make it an effective recipient. The mother's stem cells were then infused into the boy's system. It is 48 days since the transplant and the boy has shown remarkable recovery. "We bring him back to work for check up," his parents said.

With the first ever Haplo-identical bone marrow transplant success story on their log, the hospital formally launched the MDTT Institute of Haematology, Haematology and Bone Marrow Transplant unit on Thursday.

Noting that the transplants required complex pre and post-treatment procedures, the two medical experts said the patient, who had a state-of-the-art infra-structure, also performed chemotherapy, allogeneic and cord transplants costing over Rs 10 lakh. He had succumbed in the country.

Incorporating the work, British Women's Research

Centre called for increased medical collaboration between India and the UK. "It will be one of mutual interest," he said.

An MDTT was also signed between MDTT and Westminster Hospital, London, for setting up an associated screening service, which would be the prototype for Tamil Nadu and India. "The goal is to make sure that no Indian baby is born afflicted with Thalassaemia," Dr Sarkar said.

British deputy high commissioner Mike Wilkinson, Nick Hunter of Westminster Hospital and a large British delegation participated in the function.

The couple, who sought a treatment facility to save their son's life, has only one message. Even in the face of a dreadful disease like blood cancer, it is important to give up. "We see many children dying because their parents lacked the will and awareness about transplants," they said. "But the procedure is truly expensive," they added.

But there is no regret. Although they might not call off their hounds and all the jewellery, they are happy that the doctor could give their son another lease of life.

BONE MARROW FACTS

- ▲ There are 12 bone marrow stem cell centres.
- ▲ The Indian bone marrow transplant programme was started in Chennai in 1992.
- ▲ 80,000 patients waiting for matching donors in 2010.
- ▲ The programme is now being replicated in other cities. There are plans to start an independent centre from 2012.
- ▲ Bone marrow transplant is done in 100,000 cases in India, with an estimated 10,000 in Chennai alone.
- ▲ Transplantation costs start from 10 lakh and go up to 100 lakh, depending on donor.