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Ankur's recovery is miraculous: Doctor

Malathy Iyer | TNN

Mumbai: Ankur Nath and Hemangi Sane may be showing small but distinct signs of improvement thanks to a dose of stem cell therapy, but sceptics abound. A senior doctor felt that stem cells are, overrated. Dr S Khadilkar from Bombay Hospital said, "Stem cells are promising but still in experimental stage." Another doctor said that the talk of stem cell therapy only resulted in patients making a beeline for private clinics that offered it for lakhs of rupees.

Incidentally, two former city mayors played a role in getting both Ankur and Hemangi to the Sion Hospital's stem cell therapy laboratory. While Dr Shubha Raul was instrumental in getting the hospital team led by neurosurgeon Dr Alok Sharma to evaluate Ankur, Vishaka Raut is Hemangi's aunt. "My aunt was confident that stem cells would help me, but I was sceptical, having tried out many therapies," said Dr Hemangi.

The first patient Sion Hospital treated, Ravindra Ahire, who met with a bike accident in April 2007 and sustained severe spinal cord injuries, is, in fact, walking with a stick. "We have treated 76 patients with various diseases so far," said Dr Sharma. Sion Hospital dean Dr Sandhya Kamat said that "By offering patients stem cell therapy, we have managed to make them more independent than before." In fact, Dr Sharma feels that Ankur's recovery "after stem cell therapy is nothing short of miraculous". For one, Ankur was the first patient on a ventilator to be treated by the Sion team.

THE STEM CELL PROCEDURE

1) Retrieving the bone marrow from the patient in the operation theatre 2) Harvesting the stem cells from the collected bone marrow. This is done in the stem cell culture lab. 3) Five to six hours later, the stem cells are injected into the cerebral spinal fluid or the spinal cord.

HOW IT WORKS

* Stem cells harvested from the patient's bone marrow liberate growth factors such as NGF (nerve-derived growth factor) and VEGF (vascular endothelial growth factor). These result in neuronogenesis, or production of more neurons. This protects existing neurons from more damage. The stem cell infusion also helps esoangiogenesis (stimulation, regeneration and migration of cells that eventually develop into muscles).

Source: Dr Prerna Badhe, neuropathologist and visiting stem cell consultant at Sion Hospital