

Coming soon, triple therapy to make hearts beat longer

Indian-American Doctor Plans To Conduct First Surgery In City In Early 2013

Pratibha Masand | TNN

Soon, people suffering from heart troubles can avail of a new therapy. For the first time in India, to resuscitate weak hearts and make them stronger, an Indian-American surgeon will carry out triple therapy—a combination of angiogenesis, stem cells and bypass surgery.

Dr Mukesh Hariawala is all set to introduce the “natural bypass” in Mumbai’s Jaslok Hospital in the first quarter of 2013. The surgery involves spontaneous development of new blood vessels in the heart by laser stimulation and subsequent injection of patient’s own stem cells harvested from bone marrow.

“The surgery is like a natural bypass, wherein, we create alternative vessels from body’s own functions

Dr Mukesh Hariawala

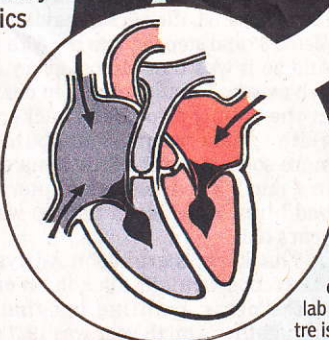
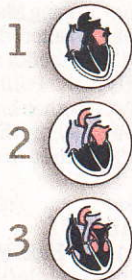
Graphic: Bhagvan Das

MAKING **HEART** STRONGER

Triple heart therapy is a combination of angiogenesis, stem cells and bypass surgery, and is done as a single operation

It is best suited for patients with diffuse three-vessel coronary artery disease, especially among diabetics

The triple heart therapy is done only on patients on whom bypass surgery alone will not work



For the triple heart surgery, a hybrid suite having a combination of cath lab and operation theatre is required



PROCEDURE

➤ **Angiogenesis** is a process where new blood vessels are grown on the heart from pre-existing ones. In triple therapy, stimulation is done by lasers on the heart that releases VEGF (vascular endothelial growth factor)

➤ **Stem cells** are derived from the hip bone marrow of the patient. This is filtered during the bypass surgery and injected in the matrix portion of the heart, where laser stimulation is done

➤ **Bypass surgery** is also carried out at the same time

THE IMPACT



In about 8 weeks, **complete restoration of blood supply** is achieved and the patient is unlikely to need repeat surgery in the future

INDIA PLANS



Triple heart therapy will be offered **first in Mumbai’s Jaslok Hospital** as part of a clinical trial. Thereafter, multiple hospitals in India will be included in the trial. So far, the surgery has been successfully carried out on 22 patients worldwide