

# THE WEEK

**42 COALGATE  
FROTH  
HAS THE BJP'S  
STRATEGY  
MISFIRED?**

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## ORGAN DONATION

# The Multiplier effect

**A brain-dead patient can benefit 15 to 20 people, if the organs are properly harvest**

BY REKHA DIXIT

Heart, liver, kidney ... ten miles away. Thus went a horror story children would recount some years ago. Nozer Canteenwalla, 47, amends it to "nine years away". That was how long the insurance officer from Mumbai waited to receive a kidney.

Diagnosed with a hereditary polycystic kidney disease in 2003, Canteenwalla survived on a painful, expensive and complicated dialysis regime till he got that call every organ failure patient waits for. "It was at 2 a.m., exactly 13 months ago, that my hospital called up to say there was a brain-dead patient whose kidney was available, and whether I was willing to have the transplant," he says. Within 12 hours, a kidney was being sewn into Canteenwalla's body, giving him a new lease of life. He was fortunate that his wife bore fruit. But he recalls how, during his dialysis years, he saw people "dying left, right and centre as they waited for an organ donation".

Some days ago, Union minister Vilasrao Deshmukh died of multiple organ failure. His life could have been saved with timely transplants. Because of his VVIP status, the minister was able to jump a queue of 300. The hospital found a brain dead patient, an accident victim from Tamil Nadu. But while the family dithered over consenting to the donation, the patient had a cardiac arrest, rendering most of his

organs unfit for donation. Deshmukh's condition, too, deteriorated and he died. Ironically, he held the science and technology portfolio.

If this is the plight of a senior minister, imagine the ordeal of an ordinary patient on the recipient list, who has either clout to pull strings nor money to surreptitiously buy an organ. Here are some hard facts: Every year, two lakh people in India develop end-stage kidney disease. But only 4,000 transplants are performed, of which less than 10 per cent are from deceased (cadaver) donations. At any given time, there are 20,000 people in India awaiting a liver, but only 500 a year get the transplant.

It is a shame that when the knowhow to save a life is available, the patient dies for want of an organ. Arti Vij, in charge of All India Institute of Medical Sciences' Organ Retrieval Banking Organisation (ORBO), notes that one deceased donor can benefit 15 to 20 people, if the organs are properly harvested. You can retrieve the heart, kidneys, liver, pancreas, intestine bones, skin, lung and corneas, for instance. "The person can live on through so many people," she says.

Kidneys can come from live donors. The liver, too, since in many cases, you don't need an entire liver, just a section is enough as the liver regenerates itself. However, for heart and corneal transplants, you are dependent on deceased donors.

"There are two kinds of deaths: brain and cardiac. A brain-dead person will not

### Process of donation

There is no age limit for organ donation. A patient's medical history is more important than his age. A person can pledge that after death his organs can be used for transplantation. However, the prerogative on the decision eventually rests with the family of the deceased. In the case of brain-dead patients, a team of four government-approved doctors, one of whom is the treating physician, performs a battery of tests on the patient twice, at an interval of six to eight hours, before the final diagnosis.

### Legal standing

The Transplantation of Human Organs Act, 1994 has made organ transplantation legal in India.

### Hurdles

Low acceptance for brain death, religious myths, disfigurement of the deceased's body and divided family opinion.

### Kidney donor chain

A Catholic priest, Father Davis Chiramal, donated his kidney to a patient suffering from acute renal failure. He started a kidney bank

## A gift of life

whose first donor was V-Guard Group chairman Kochouseph Chittilappilly. The wife of the person who received a kidney from Chittilappilly pledged to donate her kidney to another patient, thus starting a chain of donors.

### Scary numbers

Every year, two lakh people in India develop end-stage kidney disease. But only 4,000 transplants are performed. At any given time, 20,000 people in India await a liver, but only 500 a year get the transplant.



### Gone, forever

Union minister Vilasrao Deshmukh died of multiple organ failure after he could not get an organ transplantation done on time.

### Organs that can be donated



Cornea



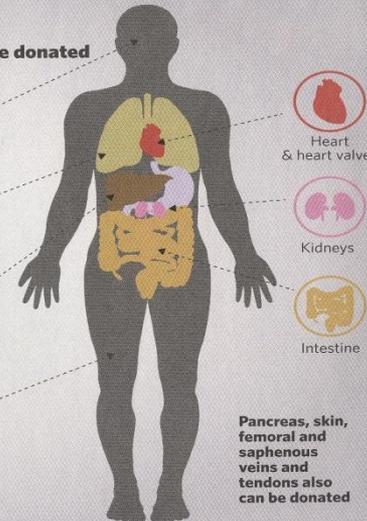
Lungs



Liver



Bones



Heart & heart valves



Kidneys



Intestine

Pancreas, skin, femoral and saphenous veins and tendons also can be donated

RESEARCH: VIJU RAJAN; GRAPHICS: DENVAL

recover, but can be kept alive with the support of machines for a few hours," says Bharat Shah, nephrologist and managing trustee of Narmada Kidney Foundation. But once he suffers cardiac arrest, most organs become useless for transplant. You could harvest the cornea, skin, heart valves and bones within a few hours, but that's about it.

So why is there this demand and supply gap? It is not as if there is a dearth of brain-dead patients, with the high rate of road accidents in the country. "The biggest reason is the low acceptance for brain death," says Vij. "Since brain death usually occurs unexpectedly due to accidents or surgical complications, it is both difficult to approach the family and also for the family to be in a state to listen to the plea. Other reasons are religious myths, disfigurement of the deceased's body and

divided family opinion."

There are those who feel there could be a little racket in certifying brain death for organ harvest. But the system is transparent and scientific. A team of four government-approved doctors, one of whom is the treating physician, performs a battery of tests on the patient twice, at an interval of six to eight hours, before the final diagnosis.

While the doctors do not say this, there is also the loss of usable organs because of inadequate inter-hospital cooperation. At present, organ waiting lists are maintained by individual hospitals, though the government is working towards a National Organ Transplant Programme to centralise the activities. Meanwhile, the underground kidneys-for-sale market thrives.

The best way to address the shortage

is to get people to pledge their organs while they are healthy. The pledging process is complicated, because it requires the sanction of a witness who is a blood relative. So, this is a family decision. AIIMS has a list of over 17,000 pledged donors and efforts is on to augment numbers.

A cue could be taken from the Indian Army, which has reported notable success in motivating relatives of brain dead patients and carried out multiple transplants from a single donor at its Research and Referral Hospital in Delhi. It boasts of a nearly 50 per cent conversion rate of brain-dead patients to organ donation and at last count reported 26 multiple organ donations.

Now, this is the multiplier effect to work towards. ●