

## Transplants

Human-to-human transplantation of organs has been accepted by doctors worldwide as the best line of treatment and often the only one for a wide range of fatal diseases such as End Stage Renal Disease (kidney failure). With an estimated 100 per million people suffering from renal failure there could well be about 100,000 such patients per year in India who need renal transplant.

Only about 5-10 percent of these patients with renal failure have a transplant.

Organ transplantation has been one of the greatest advances of modern science that has resulted in many patients getting a renewed lease of life. It would not be possible without organ donation. Organs can be donated by a living person, after natural death or after "brain death". After natural death only a few tissues can be donated (like cornea, bone, skin and blood vessels) whereas after brain death almost 37 different organs and tissues can be donated including critical organs such as kidneys, heart, liver and lungs.

## transform lives

The increasing effectiveness of transplantation means that many more patients can be considered for treatment in this way. But there is a serious shortage of donors.

For some people this means waiting, sometime for years, and undergoing difficult and stressful treatment. For all too many it means they will die before a suitable organ becomes available.

## **About Organ**

#### What is organ donation?

It means that a person pledges during his lifetime that after death, organs from his/her body can be used for transplantation to help terminally ill patients and giving them a new lease of life.

#### There are two ways of Organ donation:

- 1. Donation during Life: only immediate blood relations (brother, sister, parents & children) can donate as per the Transplantation of Human Organ Act 1994. Living donor can donate only few organs, one kidney (as one kidney is capable of maintaining the body functions), a portion of pancreas (as half of the pancreas is adequate for sustaining pancreatic functions) and part of the liver (as the few segments that are donated will regenerate after a period of time) can be donated.
- 2. Donation after death: can donate all organs after brain death.

#### What organs and Tissues can be donated?

The major donor organs and tissues are heart, lungs, liver, pancreas, kidneys, eyes, heart valves, skin, bones, bone marrow, connective tissues, middle ear, and blood vessels. Therefore one donor can possibly give gift of life to many terminally ill patients who would otherwise die in a short period of time.

### Donation

#### What is brain death?

It is the irreversible and permanent cessation of all brain functions. Brain can no longer send messages to the body to perform vital functions like breathing, sensation, obeying commands etc. Such persons are kept on artificial support (ventilation) to maintain oxygenation of organs so that the organs are in healthy condition until they are removed. Most cases of brain death occur due to head injuries, brain tumors and stroke. Organs of such patients can be transplanted in organ failure patients to provide them a new lease of life.

#### How quickly should the organs be donated?

Healthy organs should be transplanted as soon as possible after brain death from the donor to the recipient.

#### Who can donate organs after death?

Anyone, regardless of age, race or gender can become an organ and tissue donor. If he/she is under the age of 18 years, then the consent of parent or legal guardian is essential. Medical suitability for donation is determined at the time of death.

## How is brain death different from natural death?

Death occurs when blood stops flowing in the body. In some patients Eg: Head injuries - blood

## **About Organ**

flow to the brain stops first followed by stopping of vital functions of brain. The flow to the other organs in these patients can be maintained by artificial machine for some period of time during which period organ donation can take place. In case of natural death heart stops functioning first, leaving no scope to maintain circulation to the rest of the organs.

#### What is a 'Donor Card'?

Donor Card is a way of expressing your wishes. It is similar to a will. By signing the Donor Card, you agree to donate your organ.

#### Where do I keep the Donar Card?

Keep this card always with you in your purse or wallet. Let your close relatives know your wishes about organ donation as they are the ones who will implement your wishes of donating organs after your death.

## Who else needs to sign my 'Donor Card' and Why?

By law, two witnesses are required to sign your consent form for donation. One of these two has to be a near relative, the second witness can be a friend or another relative.

## Donation

## Who can give consent for organ donation after brain death?

Donors who have during their lifetime consented for organ donation in writing in the presence of two witnesses (at least one of whom is a near relative), should carry their donor cards with them and also express their wishes to their near and dear ones. In case of no such consent or donor pledge form was filled before death, then the authority to give consent for organ donation lies with the person lawfully in possession of the dead body, who in majority of cases are the near relatives.

## Which terminal diseases can be cured by transplant?

Here are some terminal diseases which can be cured by the transplantation:

Heart	Heart failure		
Lungs	Terminal lung illnesses		
Kidneys	Kidney failure		
Liver	Liver failure		
Pancreas	Diabetes		
Eyes	Blindness		
Heart valve	Valvular disease		
Skin	Severe burns		

## **About Organ**

#### Who will receive your organ?

Your vital organs will be transplanted into those individuals who need them most urgently. Gifts of life (Organs) are matched to recipients on the basis of medical suitability, urgency of transplant, duration on the waiting list and geographical location.

### Is there any charge to my family for organ donation?

No, there is no charge nor payment for organ/tissues used in transplantations. Organ donation is a true gift

### Does organ / tissue removal affect cremation / burial arrangements or disfigure the body?

No. The removal of organs or tissues will not interfere with customary funeral or burial arrangements. The appearance of the body is not altered. A highly skilled surgical transplant team removes the organs and tissues, which can be transplanted in other patients. Surgeons stitch up the body carefully, hence no disfigurement occurs. The body can be viewed as in any case of death and funeral arrangements need not be delayed.

## Donation

## Will the doctor ask permission of donation from my family, once the signed donor card is found?

Yes. Doctor will always ask the permission of organ donation from the family if your signed card is sighted. Therefore, it is important that you discuss your decision with family members and loved ones so that it will be easier for them to follow through with your wishes

#### What is legal position on organs donations?

It is legal by law. The government of India has enacted the "Transplantation of Human Organs Act 1994", which has allowed organ donation. The law has also accepted Brain Death as an equivalent to natural death.

#### Can organs be removed after death at home?

No. It can only be removed when a person is brain dead in the hospital and is immediately put on a ventilator and other life support systems. After death at home, only eyes can be removed.

## **Organ Donation**

- 1. Hospital Organ Donation Registry coordinates the process of cadaver organ donation i.e. organ donation after death and transplantation.
- 2. There are two ways to donate organs:
  - a. By pledging for organ donation when a person is alive.
  - b. By consent of family after death.
- 3. During lifetime, a person can pledge for organ donation by filling up a donor form in the presence of two witnesses, one of who shall be a near relative.
- 4. The organ donor form could be obtained from Department of Transplant Surgery, PGIMER either personally or through mail.
- 5. The donor form is absolutely free of cost.
- 6. You need to fill up the donor form and get it signed by two witnesses one of whom shall be a near relative and send it to Department of Transplant Surgery.
- 7. After receiving the filled in form the Department provides the donor with an organ donor card bearing registration number on it.

## Process in PGI

- 8. It is suggested to keep the donor card in your pocket and share your decision regarding organ donation with your near and dear ones.
- 9. If a person expires without registration, the family members can donate his/her organs. For this they need to sign a consent form, which is provided at that time.
- 10. Once, the relatives give a written consent, organs are harvested within a few hours.
- 11. The family of the donor does not face any difficulty or extra burden upon them.
- 12. The transplant coordination team carries out the entire process till the relatives receive the body of the deceased.
- 13. The deceased body is given back to the family in a dignified way.
- 14. There is no disfigurement. The body can be viewed as in any case of death and funeral arrangements need not be delayed

### **MYTHS Related to**

# MYTH: A physician on emergency duty or in ICU may not do everything possible to care for me in an emergency situation in order to take my organs for transplant.

FACT: Upon arrival at an accident scene or upon receiving you in the emergency room, all medical personnel immediately spring into action to try and save your life. Physicians involved in a patient's care by law have nothing to do with transplant programs. Death can be declared only by following strict medical and legal guidelines and with the input of at least four physicians, none of whom are part of Transplant team. The local organ procurement organization does not become involved until all lifesaving efforts have failed and death has occurred.

## MYTH: Wealthy people and celebrities are moved to the top of the list ahead of "regular" patients.

FACT: The organ allocation and distribution system is blind to wealth or social status. The length of time it takes to receive a transplant is governed by many factors: blood type, patient size, time on the waiting list, severity of illness and other medical criteria. Factors such as ethnicity, gender, age, income or celebrity status are not considered when determining who receives an organ.

## **Organ Donation**

### MYTH: My religion does not support organ donation.

FACT: No major organized religion in the world objects to organ donation, donation is often encouraged as an act that exemplifies a basic religious principle - that the giving of life and alleviation of pain and suffering is the highest level of spiritual generosity and love one can offer.

### MYTH: The donor family incurs cost for organ donation.

FACT: Families of donors are in no way responsible for costs relating to organ and tissue donation. Those costs are paid by the organ donor recovery program and later billed to the transplant center, which in turn bills the transplant recipient's. Donor families pay only for medical costs up to the time of their loved one's death

## MYTH: Regular funeral services are not possible following organ donation because donation will mutilate the body.

FACT: Organ donation does not delay regular funeral or memorial services, and a normal viewing is possible. Organs and tissues are recovered using standard surgical procedures. The appearance of the donor is not altered, and after any tissues are recovered the body is fully reconstructed with prosthetics.

## **MYTHS Related to**

#### MYTH: I am too old to be a donor.

FACT: There is no age limit for donation. At the time of death, appropriate medical professionals will determine whether organs and tissues are useable for transplantation.

### MYTH: I have a history of medical illness, so you would not want my organs or tissues.

FACT: At the time of death, appropriate medical professionals will review your medical and social history to determine whether or not you can be a donor. With recent advances in transplantation, more people than ever before can be donors.

## MYTH: I don't need to register to be a donor or tell my family that I want to be a donor, because I have it written in my will.

FACT: By the time your will is read, it will be too late to recover your organs. Registering to be a donor and telling your family about your decision is the best way to ensure your wishes are carried out.

### MYTH: Organs for transplant can be bought and sold on the black market.

FACT: According to the Transplant Laws of India it is illegal to sell and buy organs in India. So no doctors would risk to do any things against the law.

## **Organ Donation**

Although illegal trade has been reported in living donor transplantation, no such activity has come to picture in deceased organ donation.

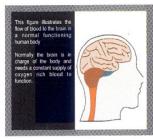
### MYTH: Someone might take my organs before I am really dead.

FACT: Donation can only occur after there is an official declaration of death based on the laws in our country.

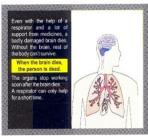
## MYTH: I am donating my entire body to science so I will also be an organ and tissue donor.

FACT: A body that is donated for scientific research cannot be used for organ and tissue donation, except in the case of corneas

## **Understanding**



Thousands of people in India await a lifesaving organ transplant. More than 100 people die every day in India waiting for the organ they so desperately need to save their lives.



Each brain dead patient can save two kidney failure patients, two liver failure patients, three lung & heart failure patients, who will otherwise die

## **Brain Death**

Head injury can cause internal bleeding and raise the ressure inside the skull. This results in blood supply to the brain tissue being out off.

Once this 'happens the brain can no honger 'lock after rest of the body.

To keep the essential organs functioning artificial breathing machines or respirator are used.



We'il never be able to eliminate the transplant waiting list, but we want to stop people from dying while they wait.

## **Donate Organs**

## **Enlighten Hope**

Your Decision to Donate Organs
will Help in Saving Vital Lifes
who are in Need of It.

For Further Information contact:
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How far that little candle throws his beams! So shines a good deed in a weary world. ~William Shakespeare