

# THE TRANSPLANTATION OF HUMAN ORGANS ACT, 1994



## Dept of Surgery

### PREDECESSORS

- ✦ Eyes Act of 1982 and Ear Drums and Ear Bones Act of 1982 (Union Territory of Delhi)
- ✦ Maharashtra Kidney Transplantation Act 1982 and Bombay Corneal Grafting Act, 1957
- ✦ Transplantation of Human Organs Bill, 1992 was Introduced in Lok Sabha on 20 August 1992.
- ✦ This Bill was assented by the President on 08 July 1994.
- ✦ It became 'The Transplantation of Human Organs Act', 1994 (42 of 1994).



- ✦ **Donor** - means a person, not less than 18 years of age, who voluntarily authorises removal of any of his organs for therapeutic purposes.
- ✦ **Hospital** - Nursing Home, Clinic, Medical Centre, medical or teaching institution for therapeutic purposes.
- ✦ **Near Relative** - Spouse, Son, Son, Daughter, Father, Mother, Brother, Sister.
- ✦ **Registered Medical Practitioner** - means a Medical Practitioner who possesses any recognized medical qualifications as defined in Clause (H) of section 2 of the Indian Medical Council Act, 1956 (102 of 1956) and is enrolled on a State Medical Council.

## BOARD OF MEDICAL EXPERTS

- ✦ Registered Medical Practitioner, in charge of the hospital in which brain-stem death occurred
- ✦ An independent RMP, being a specialist nominated by the RMP in clause (I) from the panel of names approved by appropriate authority
- ✦ A neurologist or a neurosurgeon nominated by the RMP in clause (I) from the panel of names approved by appropriate authority
- ✦ RMP treating the person whose brain-stem death has occurred

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- ✦ No authority can be granted in cases an inquest is required
- ✦ In unclaimed bodies (more than 48 hours) in a hospital or prison, the authority may be given by the person in charge of management of the hospital or prison or a person authorised in this behalf by the incharge



# APPROPRIATE AUTHORITY

- ✦ Central Govt. shall appoint ,by notification, one or more officers as AA, and State Govt. for the State.
- ✦ Duties -
  - ✦ To grant, renew, suspend and cancel registration under sub-section(3) of that section.
  - ✦ To enforce standards as prescribed.
  - ✦ To investigate any breach of provisions of act.
  - ✦ To inspect hospitals for examination of the quality of transplantation and follow-up care.
- ✦ Registration of Hospitals - apply to AA within sixty days of commencement of Act
- ✦ AA may reject the application, suspend or cancel the Registration (with or without notice)
- ✦ Appeal within thirty days to Central/State Govt against Rejection/Suspension/Cancellation



## OFFENCES AND PENALTIES

### Removal of organs without authority :

- ✦ Imprisonment upto five years and fine of ten thousand rupees
- ✦ RMP - Removal of name from register of State Medical Council for two years for first offence and permanently for subsequent offence

### Punishment for commercial dealings in human organs -

- ✦ Imprisonment for a term between two to seven years and a fine of between Rs. 10000-20000

## THE TRANSPLANTATION OF HUMAN ORGAN RULES 1995

### DUTIES OF MEDICAL PRACTITIONER -

- ✦ Authorization in Form no. 1 by donor
- ✦ Medical fitness certificate (Form no. 2)
- ✦ If donor is a near relative then Form no. 3 is filled after establishing relation
- ✦ If donor is spouse then sign a certificate in Form no. 4
- ✦ Donor had authorised in presence of two witnesses authorised removal of organ from his body, in Form No. 5



- ✦ There is lawful possession of dead body by a person having signed a certificate as specified in Form 6 or 7
- ✦ Board of experts has signed Form 8
- ✦ Form 9 has been signed by either of parents in case the deceased is less than 18 years of age
- ✦ Form 10 to be filled for transplantation by live donor other than near relative, to be signed by both prospective donor and recipient with reason of affection and attachment. This has to be approved by Authorisation Committee.

## CONDITIONS FOR GRANT OF CERTIFICATE OF REGISTRATION

### GENERAL REQUIREMENT-

- ✦ SURGICAL STAFF
- ✦ CARDIOLOGY STAFF
- ✦ NURSING STAFF
- ✦ COMMUNICATION SYSTEM
- ✦ INTENSIVIST
- ✦ MEDICAL SOCIAL WORKER
- ✦ PERFUSIONIST
- ✦ OPHTHALMOLOGIST



## NON TRANSPLANTATION PROGRAMME TEAM -

- ✦ NEUROLOGIST
  - ✦ NEUROSURGEON
  - ✦ MEDICAL SUPERINTENDENT
  - ✦ ANY OTHER HOSPITAL STAFF
  - ✦ EYE DONATION COUNSELLOR/GRIEF COUNSELLOR
  - ✦ CORNEAL SURGEONS
- 
- ✦ DEPARTMENTS - 18 (Neurology, Microbiology, Mycology, Pathology, Virology, Nephrology, GI Surgery, Anaesthesiology, Paediatrics, Physiotherapy, Immunology, Haematology, Blood Bank, Imaging Services Clinical Chemistry, Cardiology, Ophthalmology, Psychology)

## BASIC EQUIPMENT -

- ✦ OPERATING ROOM FOR ROUTINE OPEN HEART SURGERY WHICH INCLUDES HEART LUNG MACHINE AND ACCESSORIES.
- ✦ SLIT LAMP
- ✦ SPECULAR MICROSCOPE
- ✦ OPERATING MICROSCOPE

## ADDITIONAL EQUIPMENT -

- ✦ CELL SAVER
- ✦ ASSIST DEVICE LIKE IABP AND CENTRIFUGAL PUMP
- ✦ MOBILE C ARM



- ◆ RADIOIMMUNOASSAY FOR MEASURING CYCLOSPORIN LEVELS
- ◆ LAB FACILITIES
- ◆ AUTOCLAVE
- ◆ UV LAMP
- ◆ LAMINAR FLOW



## RECENT ORGAN TRAFFICKING SCANDALS

- ◆ NMC NOIDA IN 1998 - Kidney Transplantation Racket
- ◆ KAKKAR HOSPITAL, AMRITSAR - Kidney Transplantation Racket
- ◆ Kidney Transplantation Racket in five Hospitals of Hyderabad In 1993





## China harvesting prisoners' organs for transplant

Top British Surgeons Allege Convicts Are Being Killed To Suit Needs Of Organ Recipients

London: Top British transplant surgeons have accused China of harvesting the organs of thousands of executed prisoners a year to sell for transplants. The British Transplantation Society condemned the practice as unacceptable and a breach of human rights, in a statement released on Wednesday.

The move comes less than a week after Chinese officials publicly denied the practice. In March, China said it would ban the sale of human organs from July.

The British Transplantation Society says an accumulating weight of evidence suggests the organs of thousands of executed prisoners in China are being removed for transplants without consent.

Professor Stephen Wigmore, who chairs the society's ethics committee, told BBC that the speed of matching donors and patients, sometimes as little as a week, implied prisoners were being selected before execution. Chinese officials deny the allegations.

Just last week a Chinese health official said publicly that organs from executed prisoners were sometimes used, but only with prior



permission and in a very few cases. But widespread allegations have persisted for several years—including from international human rights groups.

Professor Wigmore said: "The weight of evidence has accumulated to a point over the last few months where it's really incontrovertible in our opinion. We feel that it's the right time to take a

stance against this practice." The emergence of transplant tourism has made the sale of health organs even more lucrative. Patients increasingly come from Western countries, including the UK, as well as Japan and South Korea.

Professor Wigmore described this as quite widespread and growing. He and his colleagues, he said, had all seen cases of British patients who had considered going to China for transplants. He really hoped, he added, that people would think very hard about whether they should.

Secrecy surrounding executions in China has always made it difficult to gather facts. The Chinese authorities recently announced steps to tighten regulations. From July, selling organs will be illegal and all donors must give written permission. But the practice is lucrative and critics say much will depend on how well those rules are implemented. *Agencies*



**GRISLY FIND:** Two men display pieces of bone which were dug out from the backyard of a hospital in Ratlam, 260 km west of Bhopal, on Saturday. A total of 390 pieces of bones of children were found in a pit behind the operation theatre of the missionary hospital, superintendent of police Satish Saxena said. (AP)

## 400 bones found in pit

In USA, a total of 97,179 patients were waiting for a transplant as of September 17, 2007. Following is a list by type of transplant needed:

- ✦ 73,149 patients waiting for a *kidney* transplant
- ✦ 16,702 patients waiting for a *liver* transplant
- ✦ 1,640 patients waiting for a *pancreas* transplant
- ✦ 2,316 patients waiting for a *kidney-pancreas* transplant
- ✦ 209 patients waiting for an *intestine* transplant
- ✦ 2,626 patients waiting for a *heart* transplant
- ✦ 115 patients waiting for a *heart-lung* transplant
- ✦ 2,336 patients waiting for a *lung* transplant

**97,179 TOTAL PATIENTS**

- ✦ **WAITING\*** \* Some patients are waiting for more than one organ, therefore, the total number of patients is less than the sum of patients waiting for each organ.



## Numbers of Transplants Performed During 2006

- ✦ 17,092 *kidney* transplants
- ✦ 6,650 *liver* transplants
- ✦ 463 *pancreas* transplants
- ✦ 954 *kidney-pancreas* transplants
- ✦ 175 *intestine* transplants
- ✦ 2,192 *heart* transplants
- ✦ 31 *heart-lung* transplants
- ✦ 1,405 *lung* transplants

## 28,932 TOTAL TRANSPLANTS PERFORMED\*

- Based on data from the Organ Procurement and Transplantation Network of the U.S. Department of Health and Human Services, as of June 29, 2007 -- data subject to change due to future submissions or corrections.

## THE REPORT OF TRANSPLANTATION OF HUMAN ORGANS ACT REVIEW COMMITTEE

AS PER THE DELHI HIGH COURT JUDGEMENT  
DATED 06.09.2004 IN W.P. NO.813/2004 TO  
REVIEW THE PROVISIONS OF THE  
TRANSPLANTATION OF HUMAN ORGANS ACT,  
1994 AND THE TRANSPLANTATION OF HUMAN  
ORGANS RULES, 1995)



## BACKGROUND

- ✦ A committee, hereinafter referred to as the THOA review committee, was constituted in terms of the judgement dated September 6, 2004 passed by Hon'ble Mr. Justice Manmohan Sarin of High Court of Delhi in WP(c) 813/2004 titled Balbir Singh vs. The Authorisation Committee and others (Balbir Singh Case) with direction to review the efficacy, relevance and impact of the legal provisions
- ✦ Contained in the transplantation of human organs act, 1994 (TOHO Act) And The Transplantation Of Human Organs Rules, 1994 (TOHO Rules).

The review committee commenced its working under the chairpersonship of Additional Secretary (Health) to the Government of India and set out to objectively and critically appraise and analyse the practical functionality of the provisions of the TOHO act and the TOHO rules, as defined by the Hon'ble High Court of Delhi in the Balbir Singh case.



- ✦ Make its recommendations on the composition of Authorisation Committees
- ✦ Jurisdiction of the Authorisation Committees should be enlarged by bringing within its ambit the process of certifying a "near relative" or the task be assigned to another designated authority
- ✦ Develop a mechanism where all proposed donors including 'near relatives' should be scrutinised by a committee (The Authorization Committee)

Composition of hospital based authorisation committees :  
(to be proposed by institution and notified by govt.)

- ✦ The senior most person officiating as medical director / medical superintendent of the hospital.
- ✦ DM/ADM/SDM of the district which include the officers holding equivalent post in hierarchy irrespective of nomenclature of the designation. (To be nominated by concerned State/UT GOVT.)
- ✦ Two senior medical practitioners from the same hospital who are not part of the transplant team.



- ✦ Two members being persons of high integrity, social standing and credibility, who have served in high ranking government positions, such as in higher judiciary, senior cadre of police service or who have served as a reader or professor in UGC approved university or are self-employed professionals of repute such as lawyers, chartered accountants, writers, journalists and doctors (of Indian Medical Association) etc.
  - ✦ One medical practitioner working in a government hospital to be nominated by the Central/State government.
  - ✦ Composition of state/ district level Authorisation Committees (to be constituted by Concerned state/UT govt.)
  - ✦ A medical practitioner officiating as chief medical officer or any other equivalent post in the main/major government hospital of the district.
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- ✦ DM/ADM/SDM Of the district which include the officers holding equivalent post in hierarchy irrespective of nomenclature of the designation.
  - ✦ Two senior medical practitioners to be chosen from the pool of such medical practitioners who are residing in the concerned district and who are not part of any transplant team.
  - ✦ Two senior citizens, non-medical background (one lady) of high reputation and integrity to be chosen from the pool of such citizens residing



in the same district, who have served in high ranking government positions, such as in higher judiciary, senior cadre of police service or who have served as a Reader or Professor in UGC approved University or are self-employed professionals of repute such as lawyers, chartered accountants, writers, journalists and doctors (of Indian Medical Association) etc.

- ✦ One medical practitioner working in a government hospital to be nominated by the concerned state/UT government.

## ADDITIONAL FORMS

- ✦ FORM 1A
- ✦ FORM 1B
- ✦ FORM 1C
- ✦ FORM-2:AMENDED
- ✦ FORM-4:DELETED
- ✦ FORM-7:DELETED AS IT IS IDENTICAL TO FORM 6
- ✦ FORM-10:AMENDED



- ✦ Where the proposed transplant is between persons related genetically, (e.g. Brother, sister, mother, father, children above the age of 18 years)
- ✦ The Authorisation committee must evaluate:-
- ✦ Results of tissue typing and other basic tests.
- ✦ Documentary evidence of relationship e.g. Relevant birth certificates and marriage certificate, certificate from sub-divisional magistrate/ metropolitan magistrate/or Sarpanch of the Panchayat;
- ✦ Documentary evidence of identity and residence of the proposed donor e.g. Ration card/voters identity card/passport/ driving license/ pan card/bank account and family photograph depicting the proposed donor and the proposed recipient along with another near relative. If in its opinion, the relationship is not conclusively established after evaluating the above evidence, it may in its discretion direct further medical tests as prescribed in rule 4(1).

**b) Where the proposed transplant is between a married couple:**

The authorisation committee must evaluate all available evidence to establish the fact and duration of marriage and ensure that documents such as marriage certificate, marriage Photograph is placed before the committee along with the information on the number and age of children and a family photograph depicting the entire immediate family, birth certificate of children containing particulars of parents.



- c) Where the proposed transplant is between persons who are related genetically but whose relationship cannot be established in accordance with rules:-
- Results of tissue typing and other tests with the name of the HLA laboratory and if possible the statistical estimation of the probability of a genetic relationship;
  - Documentary evidence of relationship
  - Ex. Relevant birth certificates and marriage certificate, certificate from sub-divisional magistrate/ metropolitan magistrate/or Sarpanch of the Panchayat; documentary evidence of identity and residence of the proposed donor e.g. Ration card/voters identity card/passport/ driving license/ pan card/bank account and family photograph depicting the proposed donor and the proposed recipient along with another near relative.

## WHERE THE PROPOSED TRANSPLANT IS BETWEEN INDIVIDUALS WHO ARE NOT "NEAR RELATIVES"

- The authorization committee must evaluate:-
- That there is no commercial transaction between the recipient and the donor. That no payment of money or moneys worth as referred to in the sections of the act, has been made to the donor or promised to be made to the donor or any other person.
- That the following is specifically assessed by the authorisation committee :-
- An explanation of the link between them and the circumstances which led to the offer being made;



- ✦ Reasons why the donor wishes to donate?
- ✦ Documentary evidence of the link e.g. Proof that they have lived together etc.
- ✦ Old photographs showing the donor and the recipient together.
- ✦ That there is no middleman/tout involved;
- ✦ That financial status of the donor and the recipient is probed by asking them to give appropriate evidence of their vocation and income for the previous three financial years. Any gross disparity between the status of the two, must be evaluated in the backdrop of the objective of preventing commercial dealing.
- ✦ That the donor is not a drug addict or a known person with criminal record;

- ✦ That the next of kin of the proposed unrelated donor is interviewed regarding awareness about his/her intention to donate an organ, the authenticity of the link between the donor and the recipient and the reasons for donation. Any strong views/ disagreement/objection of such kin may also be recorded and taken note of.

E) When the proposed donor or the recipient or both are foreigners:

- ✦ A senior embassy official of the country of origin has to certify the relationship between the donor and the recipient or where they are not related the reasons as to why the proposed donor is desirous of donating his organ to the proposed recipient.



- ✦ Authorisation committee can examine the cases of Indian donors consenting to donate organs to a foreign national, including a foreign national of Indian origin, with greater caution. This should be done rarely in deserving cases only.
- ✦ In case where the donor is a woman greater precautions ought to be taken. Her identity and independent consent should be confirmed/ verified by a person other than the recipient. Any document with regard to the proof of residence/ domicile and particulars of parentage should be relatable to the photo identity of the applicant in order to ensure that the documents pertain to the same person, who is the proposed donor and in the event of any inadequate or doubtful information to this effect, the authorisation

committee may in its discretion seek such other information or evidence as may be expedient and desirable in the peculiar facts of the case.

- ✦ In all cases of non-near relatives, the interview of the donor should specifically deal with the aspect of affection/attachment/ other special reason, in order to rule out commercial considerations.
- ✦ Further all donors should specifically be interviewed to rule out any element of coercion, undue influence, fraud or misrepresentation in the proposal of donation. The authorization committee should state in writing its reason for rejecting/approving the application of the proposed donor and all approvals should be subject to the following conditions:-



- ✦ That the approved proposed donor has been and would mandatorily be subjected to all such medical tests as required at the relevant stages to determine his biological capacity and compatibility to donate the organ in question and further that the psychiatrist clearance would also be mandatory to certify his mental condition, awareness, absence of any overt or latent psychiatric disease and ability to give free consent. The committee also takes note of the recent judgement of the Hon'ble Supreme Court of India, where the "authorisation committee" of Punjab was directed to examine the donor and the recipient, while the transplantation was to be carried out at Chennai.

While an endeavour has been made to recommend the enhanced jurisdiction of the authorisation committees as envisaged in the judgement of Hon'ble Supreme Court of India, yet it is felt that several aspects peculiar to the attending ground realities were not brought to the notice of the Hon'ble apex court. For instance what happens if the donor and the recipient hail from different states; what happens if one of them or both hails from a state/states where there is/are no "authorisation committee" and lastly it is not clear as to whether the "authorisation committee" of the state where transplantation is taking place, shall retain some jurisdiction or will be completely without jurisdiction and if latter is the case then how will the medical evidence if required to be assessed, will be assessed by the domicile "authorisation committee" without resulting in delays and without compromising the other laudable objectives of the TOHO act.



## Benefits for Live Donors

- ✦ Comprehensive health care scheme may be evolved by the government.
- ✦ Life long free renal/liver checkup, follow-up and care in hospital, (including its other branches, if any), where organ donation has taken place.
- ✦ To secure the donor against mortality risk due to organ donation related reasons, a customized life insurance policy of Rs. 2 Lakhs for 3 years with one time premium to be paid by recepient.
- ✦ Certificate of appreciation to all live donors by state/local government with an identity card
- ✦ Endorsing his eligibility to obtain and avail various benefits recommended here. The card should prominently display a slogan such as "thank you for saving a life".
- ✦ Compensation for any expenses / loss of income incurred as specified in section 2 (k) of the THOA act.
- ✦ 50% concession in 2nd class by Indian railways.

Recommended procedure for medical tests for establishing genetic relationship between the recipient and "near relatives" are as follows:-

- ✦ The tests for HLA, HLA-B alleles to be performed by the serological and/or PCR based DNA methods.
- ✦ Test for HLA-DR beta genes to be performed using the pcr based DNA methods.
- ✦ Test for HLA-DR beta genes to be performed using the PCR based DNA



- Methods where the above two tests does not establish a genetic relationship between the donor and the recipient, the same tests to be performed on both or at least one parent. If parents are not available, same tests to be performed on such relatives of donor and recipient as are available and are willing to be tested.
- Where the tests referred to above do not establish a genetic relationship between the donor and the recipient,



- ✦ Tests for DNA fingerprinting using single locus/multilocus polymorphic probes to be performed.

- ✦ The head of the testing laboratory should state in writing whether or not he/she is satisfied that the claimed genetic relationship between the donor and the recipient is established

### ✦ Promote Swap Operations:

Swap operations that is to say that two different willing but incompatible 'near relative' donors (vis-à-vis their intended related recipient) are permitted to donate their organs in exchange without any commercial interest and only due to the reason that despite willingness, their organ was not found medically compatible for their intended recipients. This would greatly help patients who have 'near relatives' willing to donate but incompatible for their recipient. Swap operations may be considered by authorization committee on case to case basis and as per the existing THOA act and rules.



- ✦ Unrelated donors can donate 'by reason of affection or attachment' towards the recipient (Ch 2, Sect 9(3))
- ✦ This requires obtaining prior approval from an authorising committee.

## EFFECTIVENESS OF ACT

- ✦ *"THE ACT HAS BECOME USELESS BECAUSE IT HAS NOT HELPED STOP THE COMMERCIALISATION OF ORGAN DONATION. IN FACT, IT HAS INCREASED OVER THE RECENT PAST."*

**[NEPHROLOGIST]**

- ✦ *"I RECEIVED SOME MONEY FROM THE RECIPIENT FOR DONATING MY KIDNEY AND I DONATED IT BECAUSE OF MONEY."*

**[DONOR]**



## ★ CONSTRAINTS ON IMPLEMENTATION COMMERCIAL INTERESTS (MIDDLEMEN AND SERVICE PROVIDERS):

*" I paid my broker his due as i was wheeled into the operation theatre. He didn't move away from the stretcher until i paid because he was not sure of me coming back alive. He made sure of getting paid for arranging a donor for me."*

(RECEPIENT)

*★ '...It is possible for us to cut corners and lower the norms required for performing transplantation..... The lack of standards and economic pressures means that people will cut corners.'*

(NEPHROLOGIST)

## ★ CONSTRAINTS ON IMPLEMENTATION AMBIGUITIES AND LOOPHOLES IN THE ACT

*'I was asked to pose for a photograph with the recipient and act as his wife for a while. I was told that this arrangement will help me in escaping the rules and regulations and will also expedite payments to me.'*

(DONOR)

*' My second daughter soon after her marriage was advised to undergo transplant surgery. Although my first daughter was willing to donate her kidney, her husband demanded a sum of money ... I helped out with my own savings and we paid nearly Rs 100,000 US \$2,298; €1,890] to my first son-in-law.'*

(MOTHER OF RECIPIENT)



## ✦ CONSTRAINTS ON IMPLEMENTATION- LOW MONITORING CAPACITY OF REGULATORY AUTHORITIES

*'I was asked by the recipient and the middleman to report a wrong address to the ac to escape police inquiries later.'*

**(DONOR)**

*... It is not possible for us to go on checking this as we have a large number of such applications to scrutinise Every week. As such, we have no mechanism to police this practice and the rules as they exist do not require of us such monitoring.'*

**(MEMBER OF AC)**

## CONSTRAINTS ON IMPLEMENTATION PRESSURES AND RESPONSIBILITIES EXERTED ON THE ACS

*Imagine you are in need of a kidney and have been waiting for a year or so. This is a life and death situation. What can you do if you don't find a related donor? Is it correct to stop a donor from giving his/her organ, even though he/she may receive some money in return for his organ? Is it correct to stop a patient receiving an unrelated kidney from a donor?'*

**(FORMER MEMBER OF AC)**



## 🌟 CONSTRAINTS ON IMPLEMENTATION

*We too are human beings and we cannot easily say 'no' to applicants seeking our approval for receiving unrelated kidneys, even when we strongly suspect monetary transactions between them. It is very difficult to disapprove them especially when they are in tears crying for our help and have been suffering from want of a kidney for several months. We tend to give in especially when patients undergo transplant surgery for the second time, which is not uncommon.*

(FORMER GOVT OFFICIAL)

Summing up, commercialisation is widely acknowledged to exist.

Factors that explain failure of THOA

- 🌟 Key commercial interests (notably middlemen/brokers and service providers)
- 🌟 The ambiguities and loopholes in the act,
- 🌟 The low monitoring capacity of regulatory authorities
- 🌟 The pressures and responsibilities exerted on the ACs



## ✦ ETHICS

" Ethics does not treat the world. Ethics must be a condition of the world, like logic."

WITTGENSTEIN

- ✦ Ethical issues related to the donor's family.
- ✦ Relation between brain death & organ donation.
- ✦ Decision maker in the family.
- ✦ Incentives
- ✦ Religious issues
- ✦ Medico-legal case
- ✦ Conditions / choice regarding recipients.

## ETHICAL ISSUES FACED AT THE HOSPITAL LEVEL

- ✦ ROLE CLARIFICATION & AUTHORITY IN TEAM
- ✦ PRESSURE FROM TRANSPLANT TEAM
- ✦ COMFORTABILITY FACTOR IN NON-NEUROLOGISTS & SURGEONS.
- ✦ RELATION BETWEEN BRAIN DEATH & ORGAN DONATION.



## LEGAL ASPECTS

- ◆ No actual penalization of people involved in organ rackets till date.
- ◆ Allows brain death to be recognized in only selected recognized organizations.



## GLOBAL ETHICAL ISSUES

- ◆ INTERNET SOLICITING
- ◆ DIFF. SOURCES OF ORGANS
- ◆ "ORGAN MARKET": IMPACT ON CADAVER TRANSPLANT.





## RECOMMENDATIONS / POSSIBLE SOLUTIONS

- ◆ NO MATTER WHAT THE SITUATION, THE SOLUTIONS PROPOSED, "THE DIGNITY OF THE LIVING & THE DYING REMAINS AT STAKE & MUST BE FACTORED INTO THE EQUATION."



## POSSIBLE BIOLOGICAL SOLUTIONS

- ◆ XENO-TRANSPLANTATION
- ◆ CLONING
- ◆ DEVELOPING ARTIFICIAL ORGANS.
- ◆ DEVELOPING ORGANS FROM PATIENT'S STEM CELLS.





## SOCIETAL / GLOBAL SOLUTIONS

- ◆ ROLE OF MEDIA TO INCREASE AWARENESS OF ORGAN DONATION.
- ◆ PROMOTE ORGAN DONATION IN ALL COMMUNITIES.



## STATE LEVEL SOLUTIONS

- ◆ REQUIRED CHANGES / MODIFICATIONS IN EXISTING LAW IN INDIA.
- ◆ CONSENT: INFORMED V/S PRESUMED.
- ◆ MANDATED CHOICE OR REQUIRED RESPONSE POLICY.
- ◆ PROVISION OF REQUIRED FACILITIES.





## INSTITUTIONAL LEVEL SOLUTIONS

- ◆ COUNSELING AT HOSPITAL LEVEL.
- ◆ APPROACHING EVERY BRAIN DEAD PATIENT.
- ◆ MULTI-DIMENSIONAL APPROACH TO MEET PHYSICAL, PSYCHOLOGICAL, SOCIAL & SPIRITUAL NEEDS.





## INDIVIDUAL ACTIONS AS SOLUTIONS

- ◆ DONOR CARDS / ADVANCE DIRECTIVES
- ◆ MOTIVATING ONESELF AND OTHERS
- ◆ MEDICAL PROFESSIONALS TO PROMOTE UNDERSTANDING OF BRAIN DEATH & ORGAN DONATION





- 
- ◆ Possible Policy Options
  - ◆ Tighten Wording Of Act.
  - ◆ Remove Provisions For Spouse And 'Affection And Attachment'
  - ◆ Mandate 3rd Party Tissue Testing
  - ◆ Promote Cadaveric Program



◆ *What is truly distinctive about transplantation is not technology but ethics. Transplantation is the only area in all health care that cannot exist without the participation of the public. It is the individual citizen who while alive or after death makes organs and tissues available for transplantation. If there were no gifts of organs or tissues, transplantation would come to a grinding halt.*

**Arthur Caplan,  
Bioethicist**



# Organ Donor Card

## अव्यय दान पत्र

Keep this card always with you & share your decision with your family.

"Don't take your organs to heaven for  
God knows they are needed here"

Name : \_\_\_\_\_  
नाम : \_\_\_\_\_  
Age : \_\_\_\_\_ Blood Group : \_\_\_\_\_  
वय : \_\_\_\_\_ रक्त गट : \_\_\_\_\_

## Organ transplants offer gift of life

### Family donates organs of loved one

By Jo Anna Matejka

Many people this holiday season will be giving thanks for the blessing of organ donation. The family of Donnie Neagle will be giving thanks for the opportunity for his memory to live on through the lives his organs saved after he died in a motorcycle accident this spring.

Neagle was born Dec. 25, 1964 and died April 28, 2004 enjoying one of the things in loved: riding his 2003 Fatboy Harley Davidson, said his wife, Teri Neagle.

The couple married in Terrell in April of 1993 and moved to Lake Tawakoni in 1999. In 1998, they started DL Neagle Survey Co. out of their home and when it grew, they moved into a family-owned strip center, Teri Neagle said.

"Donnie was able to enjoy the things in life that he worked so hard for and that is why I made the easy decision to donate his organs and tissue so that others could



Neagle

have a second chance at life," she said.

According to the Coalition on Donation, 17 Americans die every day waiting for an organ transplant. One person can save or enhance the lives of 50 people via organ donation.

Neagle's organs saved three lives. His liver saved a 39-year-old Central Texas man and his kidneys saved a 69-year-old North Texas man and a 54-year-old Southeast Texas woman.

Many other people received skin grafts from Neagle and after a transplant of Neagle's tissue, one 23-year-old regained sight.

"We all miss Donnie very much, but to know that he was able to help others with his organs and tissue makes us know that Donnie lives on," Teri Neagle said. "We will never forget. We will live our lives as Donnie would want us to live and we will have many new relationships with the gifts Donnie was able to give other families."

The Coalition for Donation encourages families to talk about organ donations this Thanksgiving through the Give Thanks - Give Life program. For information, see [www.donatelife.net](http://www.donatelife.net).

### Father of five waits for new heart

By Alison Walker

For Greg Davis, the importance of transplants has a whole new meaning. In fact, Davis' very life lies in the balance of receiving a new heart.

Davis, the 35-year-old son of Roger and Judy Davis of Terrell, was recently told he has less than two years life expectancy if he doesn't receive a heart transplant.

"It's really important to me now," said Davis when asked about becoming a donor.

Davis said his medical problems would prevent him from being a heart donor, but he never considered the possibility of donating other organs.

"I'm definitely going to look into it now," Davis said.

Friends and family currently are working on several fund-raisers, including a cookbook, calendars and concerts, to try to raise the \$200,000 deposit required for the heart transplant. So far, they have



Davis

raised only about \$9,000.

But, even once the money is raised Davis could have a significant wait on his hands until the right heart becomes available.

Davis, who is six feet and two inches and weighs about 250 pounds, said his size and O negative blood type may require him to wait a little longer than usual.

Davis, the father of five children, was born with complex congenital heart disease.

He had two open heart surgeries, one at three weeks old and another before he turned 2.

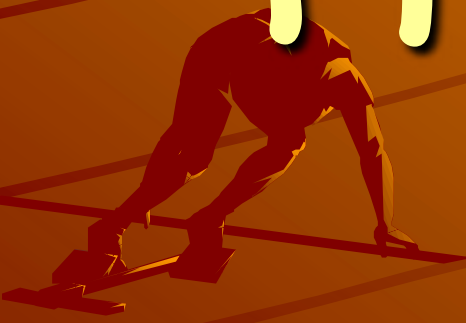
Although he has been a heart patient since birth, Davis was able to function at a relatively normal level until about eight years ago. Since the mid-1990s, Davis' condition has continued to deteriorate.

In 1996, he received a pacemaker and in 1999 he was diagnosed with congestive heart failure. In September, he was diagnosed with a severe dysfunction of his systemic ventricle.

"I never thought at 35 years old that I'd need a new heart," Davis said. "It really opens your eyes."



# Thank you



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