

**In The Name of God**

## advantages

## Living donors

The incidence of delayed allograft function is lower

Long-term allograft survival is higher.

Pre-emptive TX

older living donors had a significant long-term allograft survival advantage over those who received a kidney from a young deceased donor.

Survival of Living 6 mismatched HLA is better than Deceased haplo-identical donors

Living donors are better than deceased donors for preemptive RTX in children

Shortage of ATG and other immunosuppressive drugs for induction

No ischemic time- No inflammation in the organ

Fatwa for TX

advantages	Living donors	Disadvantages
The incidence of delayed allograft function is lower		Ethical issues
Long-term allograft survival is higher.		Absence of long term follow up
Pre-emptive TX		Transplant tourism
older living donors had a significant long-term allograft survival advantage over those who received a kidney from a young deceased donor.		Black market
Survival of Living 6 mismatched HLA is better than Deceased haplo-identical donors		Reduces Deceased donation rate??
Living donors are better than deceased donors for preemptive RTX in children		No clear law for permission of living kidney donation
Shortage of ATG and other immunosuppressive drugs for induction		Usage of addict donors
No ischemic time- No inflammation in the organ		Non consensus about which living donor for which recipient
Fatwa for TX		Insurances are inactive

## Deceased donors

### advantages

No ethical Issue

No Black market

Free of charge

Fatwa for transplantation

A large number of potential deceased donors

International acceptability

## Deceased donors

advantages	Disadvantages
No ethical Issue	Harvesting is not optimized
No Black market	Non optimized transportation of the organ
Free of charge	Sub-optimized organ
Fatwa for transplantation	Arriving of recipients too late
A large number of potential deceased donors	Delayed harvesting
International acceptability	Non clear pension of harvester and surgeon and nephrologist
	Non transparent law
	Improper advertisement
	Restriction of Immunosuppressive drugs (such as ATG)
	Immunosensitization of the recipient for future TX.
	No transparency for recipient and donor HLA typing
	Insurances are inactive

# 35 Donors in the Modarres hospital during the last 100 days

LD=25



3 rejection (12%)



All of them responded to treatment

DD=10



4 DGF (40%)



2 of them found non function

Does Deceased donation damage transplantation program?

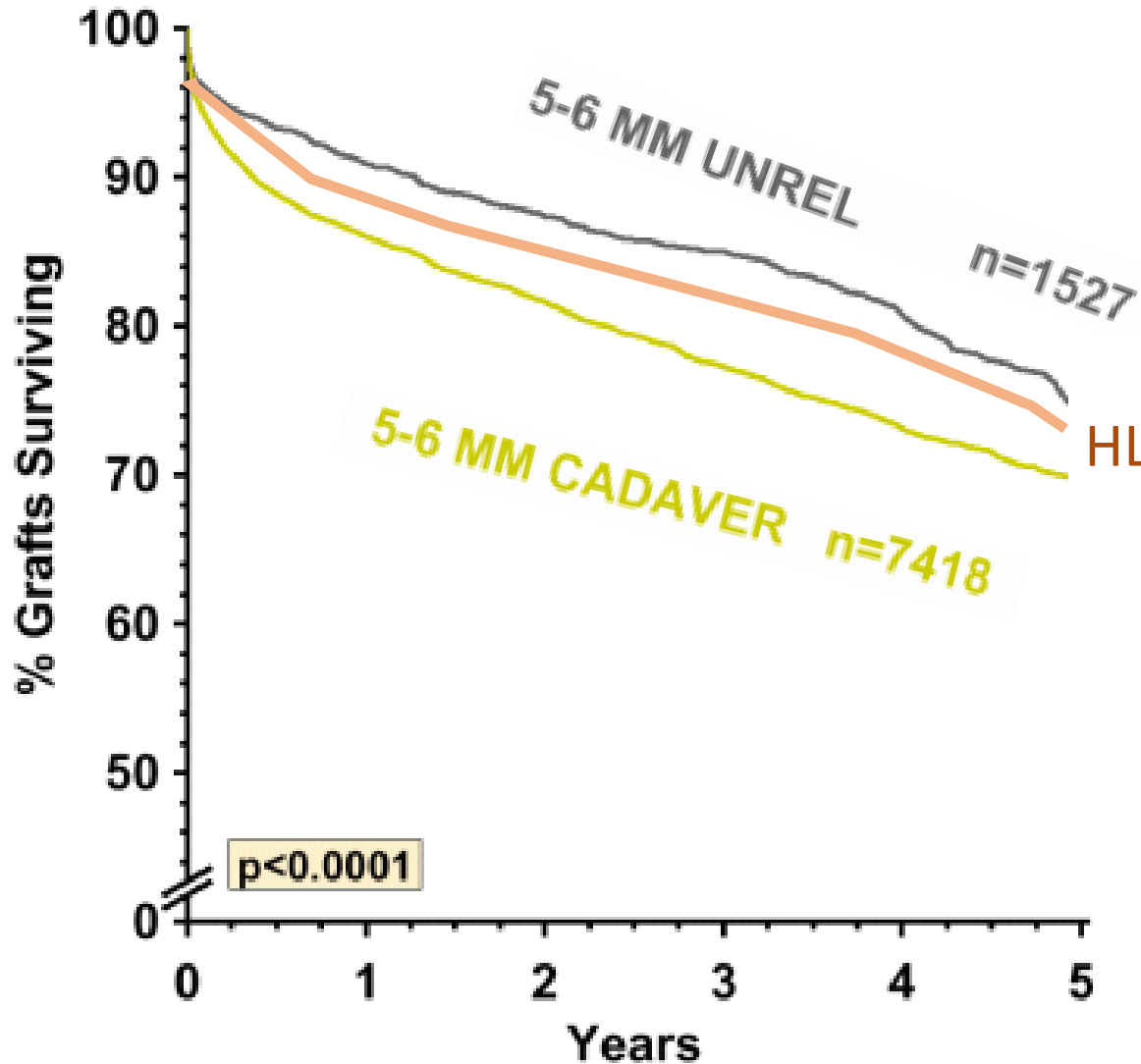
1-DGF/NGF

2-Harvesting of the prisoners organ

3- hypersensitization of recipients for second or third kidneys

# Unrelated Living vs Cadaver Donors 1995-2002

HLA-A+B+DR Mismatches

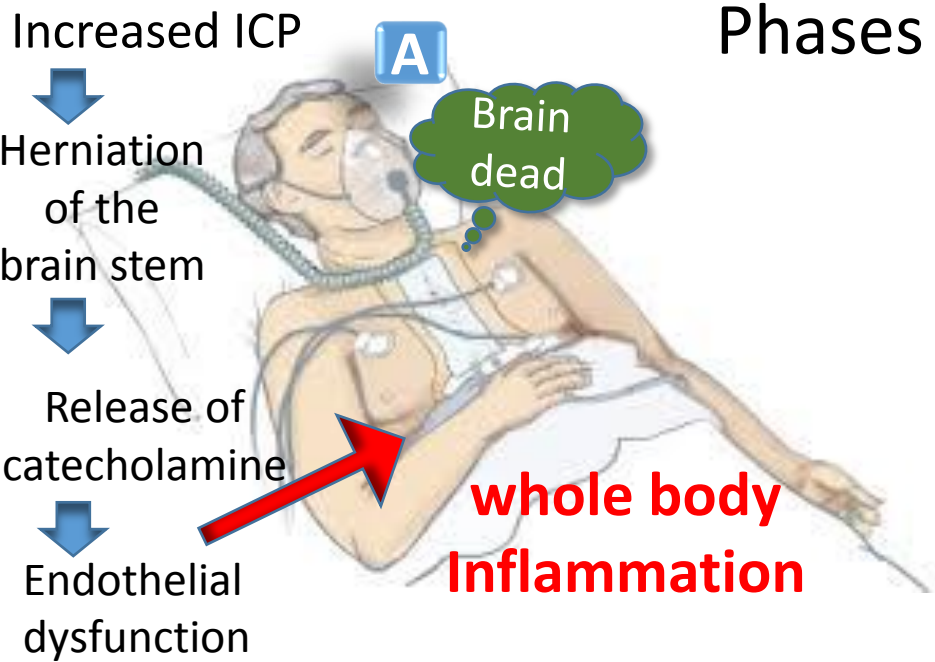


Influence  
of  
Inflammation?

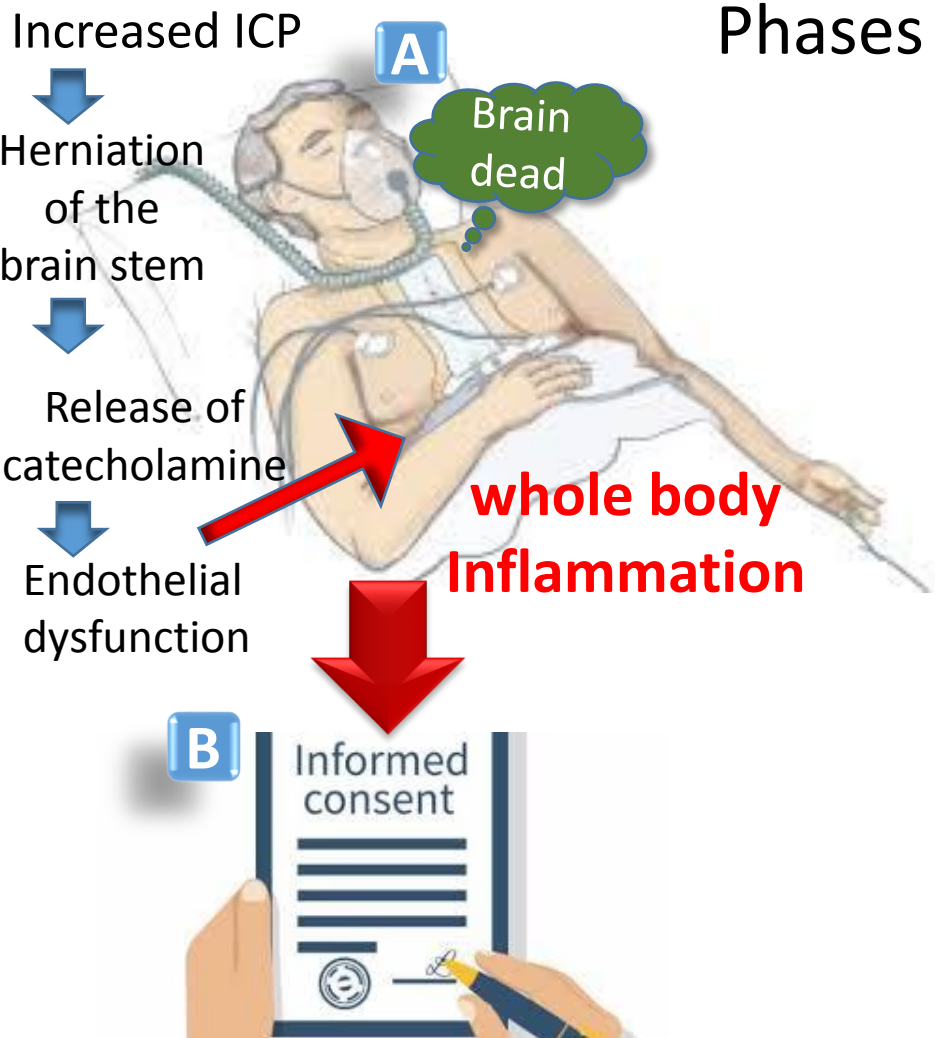
HLA matched Brain Dead Donor



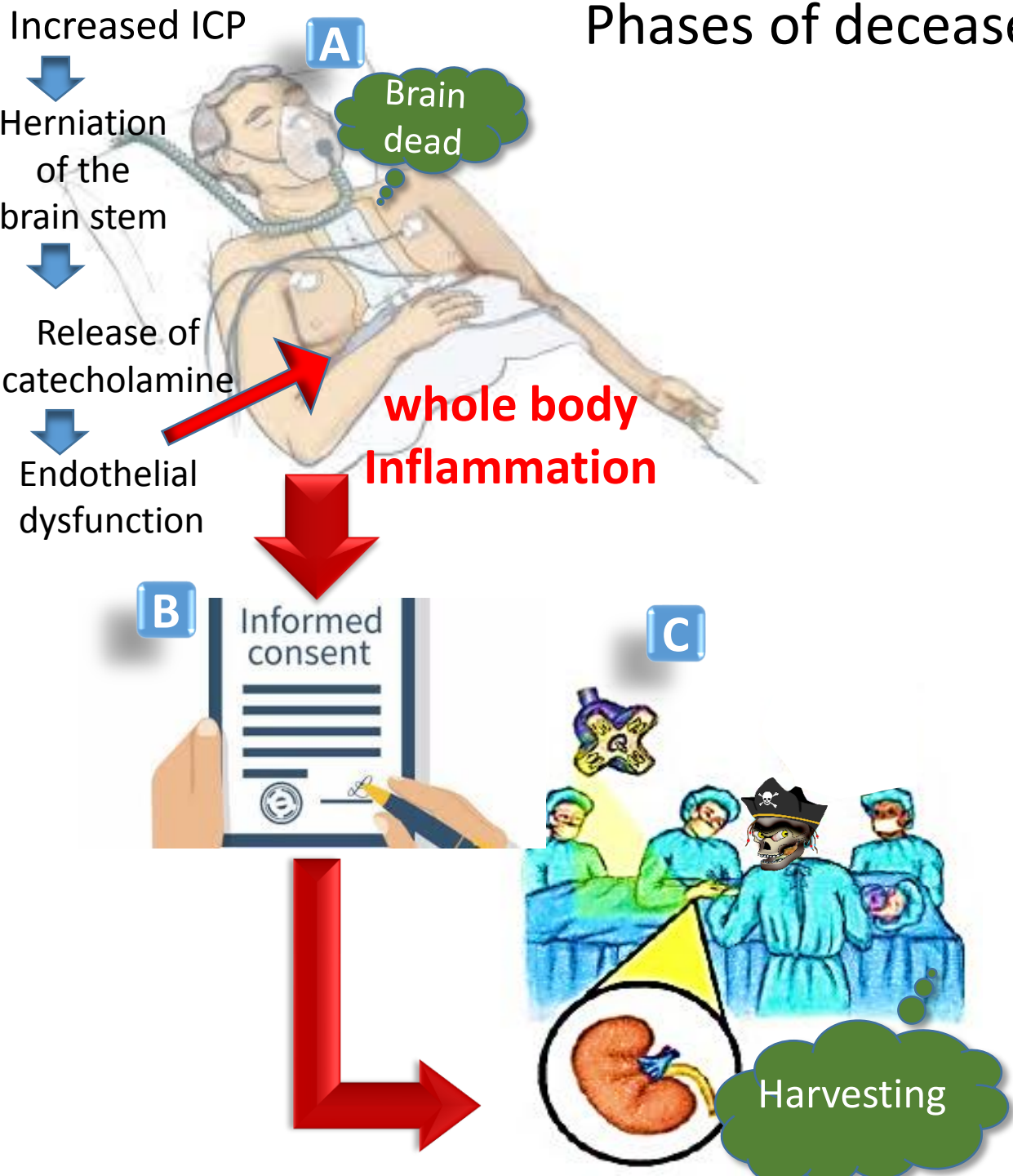
# Phases of deceased donor TX



# Phases of deceased donor TX



# Phases of deceased donor TX



# Phases of deceased donor TX

Increased ICP

A

Herniation  
of the  
brain stem

Brain  
dead

Release of  
catecholamine

Endothelial  
dysfunction

whole body  
Inflammation

B

Informed  
consent

C



Harvesting

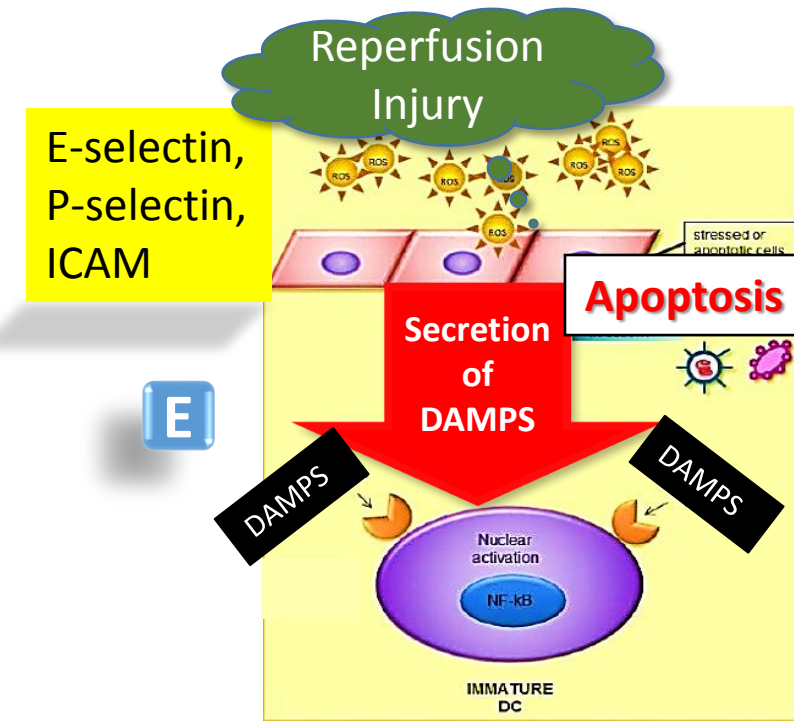
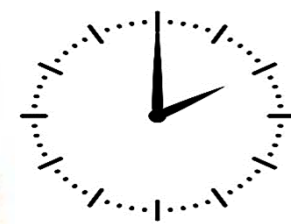
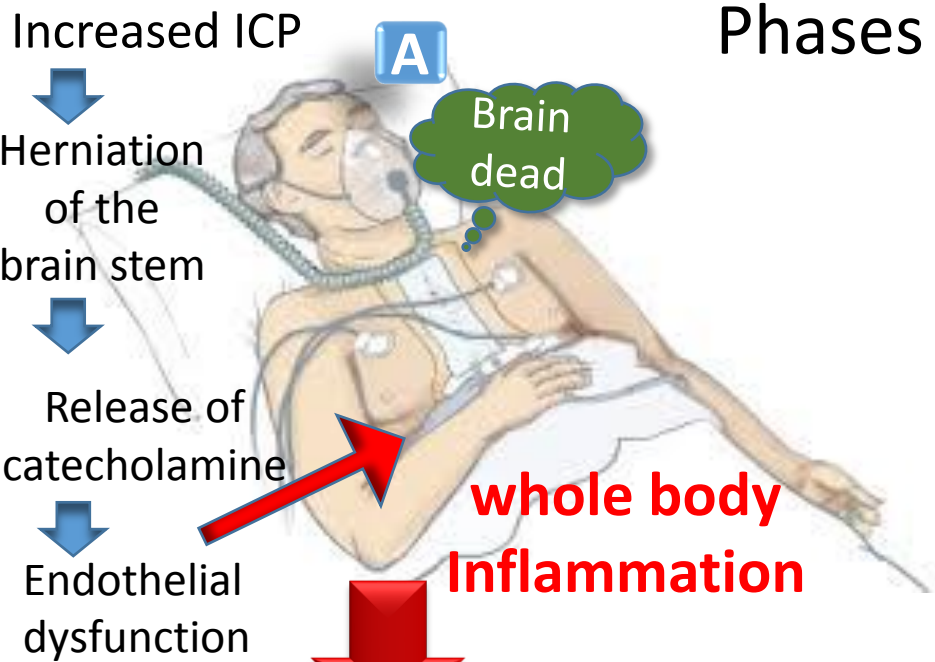


D

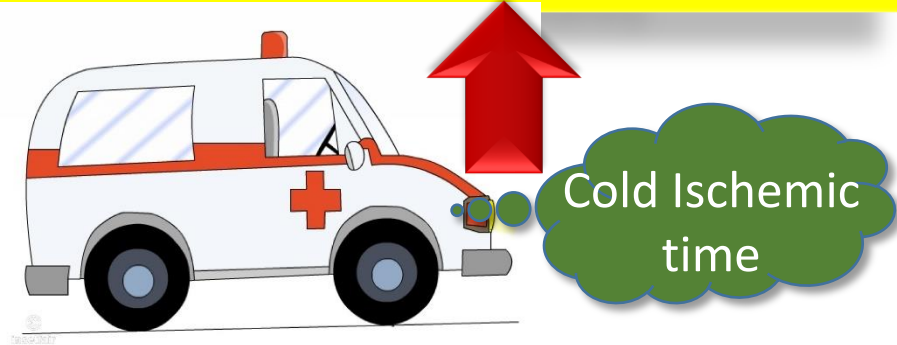


Cold Ischemic  
time

# Phases of deceased donor TX



Rolling, Adhesion, Diapedesis, Leukocyte migration into the interstitial of kidney.



# Phases of deceased donor TX

Increased ICP

Herniation of the brain stem

Release of catecholamine

Endothelial dysfunction

A

Brain dead

whole body Inflammation

B

Informed consent

C



Harvesting



D



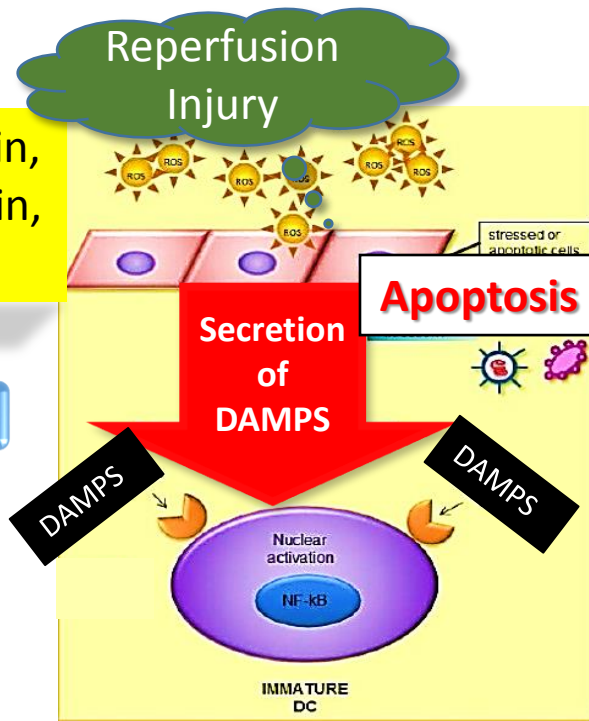
Cold Ischemic time



F

E

E-selectin, P-selectin, ICAM



Rolling, Adhesion, Diapedesis, Leukocyte migration into the interstitial of kidney.

# Different dimensions of the ethical issues in organ transplantation

- 1 The degree of individual's autonomy over his own organs and donation to other people for organ transplantation
- 2 Ethical issues related to organ transplantation from a living person to a living person or from a cadaver to a living person
- 3 Ethical issues related to brain death and assurance of individual death
- 4 Ethical issues related to obtaining consent from the organ donor
- 5 Ethical issues related to how to select the recipient and prioritize the recipients
- 6 Ethical issues related to the material and spiritual rights of the donor and to ensure the definite health of the donor
- 7 Solving the issue of transplanted organ and tissue deficiency with attention to and observance of its ethical issues
- 8 Ethical issues related to the financial relationship between the donor and the recipient and its legal controls
- 9 The fetus as an organ donor and ethical issues related to it
- 10 Sexual cells and their use in tissue transplantation and related ethical issues
- 11 Genetic engineering in transplantation and ethical issues
- 12 Animal-to-human transplantation and ethical issues related to it
- 13 Creating organ banks and how to process organs and the ethical issues related to it
- 14 Organ transplantation in children (as a recipient or donor) and ethical issues related to it



Pre-emptive RTX better than Dialysis in children





# The relationship of donor source and age on short- and long-term allograft survival in pediatric renal transplantation

A. W. Dale-Shall, J. M. Smith, M. A. McBride, S. R. Hingorani, R. A. McDonald

- ❖ Everything is not antigen matching.
- ❖ Organ procurement should be done as soon as possible after death declaration with minimal injury to the organs, with sophisticated transportation and accurate transplantation.
- ❖ chronic Allograft Dysfunction develops more common in brain-dead kidney compared with living controls.
- ❖ The use of pharmacological interventions for living or deceased donors to decline of renal function??