Introduction:

With the advancement in science and medicine transplantation of human organs for irreparable tissues and organs has come as a boon to improve the quality and longevity of life of several unfortunates. There is a huge gap between the availability and need for these organs which gives scope for malpractice for financial gain.

Organ donors are of two kinds. Live (related) donor and deceased or cadaver donor. Renal transplantation has gained wide acceptance from using kidney from a live donor. Kidney being a paired organ, it is possible for somebody to donate to their loved ones because of love and affection. Where as for heart it is from a deceased person. In order to take the heart from a deceased person the definition of death itself is redefined there is irreparable damage to the brain, while all the other organs are still functioning well. Thus brain death has become one form of death in contrast to original description of death which states that there is cessation of cardiac function. Christian Baranard has done the first heart transplant in South Africa after getting trained in USA as the legislation defining brain death was made in South Africa earlier then in USA. Since then several transplants of various organs like kidney, heart, liver, lung etc., are being done in large numbers with successful results giving new lease of life to several individuals who would have died other wise. In India also large number of kidney, heart, liver and lung transplants are being done in several hospitals with a reasonable cost attracting patients from other countries where the cost is prohibitive and laws are strict. This has resulted in...
malpractices like trading the organs getting consent for the deceased organs by various dubious methods. In order to streamline the entire transplantation procedure and to avoid misuse and abuse of the organs transplantation, Government of India has passed human organ transplantation act and amended it recently. All the states also made rules and regulations governing the organ donation, retrieval, transfer and transplantation to facilitate optimum utilization of the available organs.

After the advent of organ transplantation act in 1994, organ donation and organ transplantation procedure have come under the purview of this act and if its rules and regulations are not followed, punitive actions are imposed under this act. In certain states including AP, deceased organ donation has kick started.1,2,3.

Organ transplantation Act

This act of 1994 defines death for the purpose of organ transplantation as the brain stem death. The deceased person is the person in whom brain stem death is declared as per the rules under the act in force as on that day. The deceased organ donation had become a regular affair around the globe. Amendments are made in 2011 and rules notified in 2014.

Jeevandan scheme

In the state of Andhra Pradesh a scheme by the name 'Jeevandan Scheme' is launched which details the operative procedures related to the formation of appropriate authorities, various forms used like the consent form for organ retrieval, for donation brain stem death declaration form, brain stem death certificate, intimation of police and forensic medicine officer in medico legal cases where autopsy is legal necessity and other related issues. The state of Tamilnadu appears to have a streamlined set up and boasts the highest number of deceased organs donated, retrieved and transplanted cases.4

Organ trafficking

However there have been many issues related to organ trafficking. Sometimes the donor was not even aware of the fact that his organ (eg. Kidney) was taken out and utilized for someone needy. Illicit organ trafficking had assumed international significances. In organ trafficking gullible donors, brokers, colluding hospitals and specialist doctor have played their roles. This resulted in an international alarm.5

Istanbul summit

This was taken note of at Istanbul Summit from 30.04.2008 to 01.05.2008 in Istanbul, Turkey, where 152 participants deliberated on organ transplantation and organ trafficking, resulting in Istanbul declaration. More than 100 countries endorsed these guidelines. The member states are asked to take measures to protect the poorest and the vulnerable groups from the sale of tissues and organs and look in to issues relating to international trafficking in human tissue and organs.

For deceased donor transplantation, officially regulated bilateral or multilateral organ sharing programs, should be made between or among jurisdictions based on reciprocal organ sharing programs. For living donors if the donor and
recipient are genetically related and wish to undergo transplantation in a country which is not their residence, travel for transplantation may be permitted. If the recipient has dual citizenship and wishes a live donor transplantation from a family member in a country of citizenship and wishes a live donor transplantation from a family member in a country of citizenship which is not the place of residence, travel for transplantation is allowed. The whole purpose is to curb illicit, commercialized trafficking of organ, tissues, donors and / or recipients by proclaiming an appropriate legal sanction for transgressors.

**Declaration of death**

As the technologies improved and legal definition of death is decided as per the organ transplantation act, a new era has started in the declarations of death, donors coming forward to donate organs consequent to awareness, and the number of waiting patients, whose life can be saved and quality of life improved. This required regulatory bodies and decisions making procedures, rules and regulations.

The crucial steps in the deceased organ transplantation are consent, retrieval and transplantation.

Consent of the deceased while living in the form of a "living will" is pertinent and valid. In some countries to facilitate availability of deceased organs, the doctrine of presumed consent is enunciated which means that in all brain death cases where there is accessibility of healthy organs for retrieval, the presumptions is in favor of consent unless reverted by the deceased while alive to the effect that he is not willing to donate his organs. In India nearest legal heir or the person who is bearing the expenses for the treatment, is the person whose consent is required in the absence of any living will by the deceased. Once the consent of organ donation and organ retrieval are given, the process of declaration of brain death is brought into action. Brain death declaration means the brain stem death declaration which requires examination by a Neurosurgeon / Neurologist in the approved panel of the appropriate authority and another empanelled physician, both to be picked up by the hospital in charge, who is also part of the team of declaration of brain stem death.

The prescribed protocols and format have to be filled. There must be a gap of 6 hours between the first examination and the second examination in medico legal cases. The police should be informed to conduct inquest. The forensic medical officer be informed who after the inquest and permitting retrieval stays till the organ taking is over including taking notes for autopsy purpose. In other cases, retrieval can be done under strict precaution in an authorized center and by authorized team. If it is only retrieval center, the organs retrieved are informed to the overseeing and distributing Jeevandan authority who as per prescribed norms allows transmission to the appropriate place for organ utilization.

To mitigate shortage of organs certain countries have adopted what is known as presumed consent. The concept of presumed consent in relation to deceased organ donation lays down that unless specific objection is available in writing from a prospective donor, the medical profession can go
ahead with the retrieval of organs in a brain dead person and provide them as per regulations in force at the given place and time in consonance with the laws of the land. In question to the needy persons in the waiting list of the would be recipients.

Problems encountered

During this whole process sometimes include:
1. Hurry/ delay in brain stem death declaration
2. Non availability of Neurosurgeon/ Neurologists
3. Failure to inform forensic medical officer
4. Inefficiency of transplant counselor
5. Ambiguity about consent for taking out healthy organs
6. Delay in retrieval
7. Delay in transmission etc.

There is need for strict scrutiny of all the requirements under 'Jeevandan Scheme' and from time to time inspection by the appropriate authority to check the veracity of infrastructure, to check the availability of the required specialists in the panel and to oversee whether by and large the Jeevandan criteria are being followed scrupulously and earnestly or not.

Portends

The 'Organ Donation' process must be further simplified. Awareness campaigns through all media regarding the need, importance and significance of organ donation must be incessantly carried out, seeing and overseeing that only the really needy persons receive the benefits of transplantation where by not only the lives are saved but also quality of life is improved. It may also be considered whether the doctrine of presumed consent be brought into vogue in this country also to facilitate faster completion of the procedures leading to retrieval. The number of available deceased organs thus can be increased and the waiting lists can be reduced. This increase may in turn reduce the coercion of people to donate organs and the living organ donation can slowly take a back seat. To this end all concerned must strive to forge ahead with ease in the availability of healthy organs for transplant purpose. As the number of RTA death of healthy and young people is increasing and therefore the availability is not a huge issue once full awareness and awakening towards deceased organ transplantation picks up well. In India swapping of organs is legal. In case where A wants to donate to B, but not compatible and \( C \) wants to donate to \( D \) and not compatible, but \( A \) is compatible to \( D \) and \( C \) is compatible to \( B \), then swap transplantation is allowed. But there remain certain areas that require corrections as they still leave room to misuse/ abuse of organs.

- Coercion of person to be live donor
- Misrepresentation of facts about relationship between the donors and the recipients
- Commercialism ‘ facilitating organ donors’
- Trading by intermediaries in shifting gullible persons as donors without their knowledge.
- Taking them to foreign destinations where recipients may or may not be present.
- Person being unaware of what operation was done to him (removal of kidney to facilitate transplanting to some other person).
• Lack of effective coding system to improve traceability and vigilance for human organs.
• Lack of monitoring mechanism of the council of Europe convention on action against trafficking - HTOR- (Human Trafficking for Organ Removal).
• Potential recipients continue to travel to clinics around the world to receive a kidney from poor and poorly paid donors.7

Trafficking of organs and persons with source Countries like India, Pakistan, Egypt, Philippines, East European Nations and executed prisoners of China have influenced and eroded the legal activities in various countries. There appears like an increase in the number of transplant recipients from Gulf States, Europe, North America, Israel etc, who are flying to Eastern Europe, South Africa and Latin America to hospitals run for profit by transplant hospitals particularly for kidneys.? Organ misuse / abuse is translated into action by the traffickers who market the organs to a third country where the wealthy/ injured patients who assemble there get organ donation and have the transplant from unregistered/ unauthorized or authorized, but misused centers in that country, which hosts both the organs/ donors and the receivers to their mutual benefit and the profitability of the host as well as the traffickers.6

National self sufficiency should be the motto of all nations carrying out these procedures and curbing illicit organ transportations. Donation and transplantation by poor countries must not allow living organ donors to be sold to foreigners and develop their own adequate programs.

Conclusion

The deceased organ donation has a great potential to check unwanted trafficking in organs since proper rules and regulations are set in place by the organ transplantation act 1994 and the Jeevandan schemes adopted by states.

References:

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