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### <u>Editorial</u>

# Issues Related to Cadaver Organ Retrieval in Medicolegal Cases.

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### 1. Introduction

With advancement of sciences and technologies, new practices and procedures are being implemented in medicinal field. Organ transplantation is a procedure in which an organ is removed from a one person's body whether dead or alive and placed in the recipient's body. It replaces the damaged or missing organ in recipient's body. The donor is a person who donates the organ and recipient is a person who receives the organ. The organ can be retrieved from dead or brain dead person and used for transplantation abiding the Transplantation of Human Organ Act 1994. Amongst the transplanted organs kidneys, heart, liver, lungs, pancreas and intestines are most commonly transplanted organs. Amongst the transplanted tissues includes bones, skin, tendons, ligaments, heart valves, blood vessels and corneas, etc are most commonly transplanted tissues.

**The Transplantation of Human Organ Act 1994:** Transplantation of Human Organs Act (THOA) 1994 was enacted to provide for removal, storage and transplantation of human organs for therapeutic purposes. It aims to prevent the commercial dealings in human organs. It is now adopted by all States except J&K.<sup>1</sup>

The Transplantation of Human Organ & Tissues Amendment Act (THOTA) 2011: The Government of India enacted the Transplantation of Human Organs (Amendment) Act, 2011. It allows swapping of organs. It also included grandparents and grandchildren in the list to widen the donor pool. It applies to the States of Goa, Himachal Pradesh and West Bengal and to all the Union territories and it shall also apply to such other State which adopts this Act (Table no. 1) by resolution passed in that behalf under clause (1) of article 252 of the Constitution. The Transplantation of Human Organs and Tissues Rules, 2014 Published on 27<sup>th</sup> March 2014.<sup>2</sup>

THOA 1994	THOTA 2011
Bihar	Assam, Chhattisgarh, Jharkhand
Gujarat	Goa, Himachal Pradesh, Kerala
Haryana	Maharashtra, Manipur, Odisha
Karnataka	Punjab, Rajasthan, Sikkim
Tamil Nadu	Uttar Pradesh, West Bengal,
Madhya	Andaman and Nicobar, Chandigarh
Pradesh	
Telangana	Delhi NCR, Dadra and Nagar Haveli
Uttarakhand	Lakshadweep, Daman and Diu
Andhra	Jammu and Kashmir and Leh-
Pradesh	Ladakh, Puducherry

 Table 1: Applicability of THOA 1994 & THOTA 2011.

**Medicolegal Perspective as deceased organ donor:** In India, road traffic accident (RTA) victims are the potential organ donor pool who have who have sustained traumatic head injuries and declared brain dead.

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\***Corresponding author**: Dr Ravindra B Deokar, Professor (Additional), Department of Forensic Medicine, Seth G S Medical College & KEM Hospital, Mumbai, Maharashtra, India. Email: <u>ravindradeokar@kem.edu</u> (M)+91-9423016325. *Article Info:* Received on: 11.12.2022; Accepted on: 28.12.2022. As per the Global Status Report on Road Safety of 2018, the reported number of road traffic deaths in India was 150,785 in the year 2016 with the estimated road traffic death rate per hundred thousand population was 22.6. Across 199 countries reported in the World Road Statistics, 2018, India had been ranked number one in the number of road accident deaths.<sup>3</sup>

151,417 people succumbed to death on the Indian roads following vehicular accidents and most victims sustained head trauma in 2018.<sup>4</sup> A 5 years study of an Indian state's registry data showed that 79% of cases of organ donation came from victims of RTAs/ head trauma who had later progressed to brain death.<sup>5</sup>

Medicolegal cases includes all the vehicular and unnatural accidental cases, including the poisoning, suicide, and assault cases. There is a specific protocol laid down for organ or tissue donation in MLCs abiding the Transplantation of Human Organs Act (1994) and the Transplantation of Human Organs and Tissues (Amendment) Act 1994 (2011) of India. In a medicolegal case, the dead body is considered as state property. There is need to rule out any foul play while establishing the cause of death. Hence, while using any organ from cadaver in medicolegal cases there is need of an inquest by a police officer and further clearance from a forensic expert for organ retrieval who needs to certify that the organs can be retrieved from cadaver and not jeopardise the determination of the cause of death in that particular case.

All matters related to the organ donation and transplantation activities are coming under the purview of the **Ministry of Health and Family Welfare in India.** The matters related to the police fall under the Ministry of Home Affairs. To facilitate deceased organ donation, certain states like Tamil Nadu and Karnataka have been issued **Government Orders (GO)** to coordinate the MLC cases. The states like Maharashtra highlighted the **roles of police and forensic doctors** towards facilitating the speedy organ retrieval and successful organ donation. In India, we still faced with a **severe organ shortage in spite of having** availability of substantially **large pool of potential** organ donor.

**Various Issues related to Organ retrieval:** There are many differences in the protocols followed by the various states in the steps involved in processing and dealing of a medicolegal cases.<sup>6</sup>

1. Conducting the inquest after death of a person-

A First Information Report (FIR) at a police station nearby the accident place was registered. Based on the FIR, police starts their investigation to determine the cause of death. After FIR, the inquest is conducted abiding Section 174 of Criminal Procedure Code by the investigation officer (IO) from local jurisdiction where FIR registered. This procedure is followed in Maharashtra (Mumbai), Madhya Pradesh, Kerala, Telangana, Rajasthan and Punjab the inquest is conducted by the Investigating Officer (IO) from the local jurisdiction where the FIR was filed. Whereas, in the states of Tamil Nadu, Maharashtra (Pune area), and Delhi, to avoid delay, an investigation officer from the nearest police station start investigating till the IO from the local jurisdiction arrives.

2. Police Inquest and organ retrieval-

In Madhya Pradesh, Maharashtra (Pune area) and Kerala the police inquest is carried out after organ retrieval. In other states, the IO initiates the police inquest before organ retrieval and complete it after the retrieval process.

3. Conducting the Postmortem Examination-

The Postmortem examination is being performed in the same operation theatre where the organ retrieval procedures were carried out, in the states of Rajasthan Telangana and Madhya Pradesh. In contrast to this, in the states like Maharashtra, Punjab, Tamil Nadu, Kerala, and Delhi, the body is being moved to a mortuary to conduct the post-mortem examination.

 Examination of the head and cranial cavity during Postmortem Examination-In most of the states, the skull cap is removed to examine the cranial cavity during the post-

mortem examination. Exceptions are the Rajasthan and Telangana states.

5. No objection certificate from IO for organ retrieval-

In Maharashtra, Rajasthan, Madhya Pradesh, Delhi and Punjab, a no-objection certificate (NOC) has to be mandatorily obtained from the police before proceeding with organ retrieval procedure. However, the IO's role is limited to expediting the inquest and post-mortem procedures in the state of Tamil Nadu and Telangana. Further, the forensic autopsy surgeon authorizes the organ retrieval and further complete the post-mortem examination. Approval from neither the police nor the forensic expert is required in the retrieval process in the state of Kerala.

Dealing with the medicolegal cases is inherently complex matter with the involvement of multiple players including the extensive documentation. In this, there are two important stakeholders i.e. the **police (IO)** and the team of **forensic experts** conducting the post-mortem examination. The police are responsible for conducting an **inquest** to determine the cause of death. The forensic team need to ensure the organ retrieval process does not jeopardise with determining the cause of death.

The **Tamil Nadu GO No. 86, 2011** is **path-breaking Government Orders (GO)** issued by Tamil Nadu State which turned useful to facilitate the cadaver organ retrieval. It was issued specifically to facilitate the medicolegal organ donation cases, simplifying many hurdles. Three exclusive forms viz. request for police inquest, list of functional organs that could be retrieved, and a form authorizing organ retrieval are given as a part of this order. Also, by another circular, the state Government allowed the local police station IO to start inquest, if the police station where FIR was registered is too far.

### Suggestions/ Recommendations-

- There is need to resolve the disparities in inquest and post-mortem procedures followed by different states in MLCs. There is need of standard uniform procedures & protocols in such cases to facilitate the speedy organ retrieval.
- 2. The prompt execution of medicolegal formalities through designated police official in the shortest period will facilitate to ensure the grieving families are not further distressed waiting to receive the body of the loved ones.

3. Police personnel at all levels need to be trained in deceased donation procedures, transplant law as well as local state GOs. Government and non-government organisations need to take responsibility of the awareness on organ donation amongst the stakeholders.

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