

PROFILE AND PATTERN OF POST-MORTEM CASES

¹Dr. Neeraj Singh, ²Dr. Bhavesh Bohra

¹JR-3 Department of Biochemistry, Jhalawar medical College, Jhalawar (Raj.),

²Associate professor, Department of Forensic and Toxicology, Jhalawar medical college Jhalawar

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Corresponding author: Dr. Bhavesh Bohra

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Abstract

Background: In the present study analysis of changes in level of sodium in cadaveric synovial fluid is done, which is correlated with increasing post-mortem interval and this study have not been done in south east region of Rajasthan so far.

Methods: This study was carried out in department of Forensic Medicine and Toxicology, Jhalawar Medical College, Jhalawar. This study was done on 50 cases with known time of death who was brought in the mortuary of department of Forensic medicine and Toxicology for autopsy. The information regarding time of death were collected from hospital records. Ethical permission has been taken from college ethical committee.

Results: Deaths due to road traffic accidents & its complications constituted majority of cases 44.00% followed by poisoning 40.00%

Conclusion: This study helps to interpret different types of medico-legal autopsy cases, thereby providing an insight to the policy-makers, law custodians, and the community to look into the specific aspects of the cases and then to take proper measures to reduce mortality.

Keywords: Death, Post mortem, Age

Introduction

Criminal Procedure (Cr. P.C.) mention the concept of a medico-legal autopsy during the investigations of a sudden, suspicious, unnatural death. 2 The objective of medico-legal post-mortem examination is to establish the identity of a body, when not known; to ascertain the time since death and the cause of death; and whether the death was natural or unnatural and if unnatural, whether it was homicidal, suicidal or accidental. In case of new born infants, the question of live birth and viability assume importance and should be determined. 3 A complete autopsy involves opening all body cavities and all organs of the trunk, chest, and head. 4 Objective of the study to identify the pattern of Post-mortem Cases, with regard to various criteria like age, sex, and cause of death etc. ¹⁻⁵

Materials and Methods

This study was carried out in department of Forensic Medicine and Toxicology, Jhalawar Medical College,

Jhalawar. This study was done on 50 cases with known time of death who was brought in the mortuary of department of Forensic medicine and Toxicology for autopsy. The information regarding time of death were collected from hospital records. Ethical permission has been taken from college ethical committee.

The exclusion criteria were:-

- All the cases where the time of that was unknown.
- Body in advanced stage of decomposition.
- The extracted sample is cloudy, turbid or hemorrhagic in nature.
- Cases of joint disease/deformity. (Osteoarthritis, Rheumatoid arthritis etc)
- Cases of knee joint injury.
- When amount is less than 0.5 ml.

Results

Table 1: Demographic profile

Mean age	34.64±18.95 Yrs
Male : Female	26 : 24

Table 2: Distribution of cases according to cause of death

Cause of death	Frequency	Percent
Burn	4	8
Natural	4	8
Poisoning	20	40
Trauma	22	44
Total	50	100.0

Discussion

Out of 50 cases maximum numbers of autopsy cases were in the age group of 31–40 years which is the most productive year in one's life. These findings are in consistency with findings of Kannan K³, Mathiharan K⁵, Curran WJ⁶ & ME Bansude.⁷

In our study majority of victims were males. Similar findings are seen in studies done by Murthy *et al.*^{8,9} who studied 150 cases out of which 123(82%) were males & 27(18%) females. Mugadlimath *et al.*¹⁰ studied 64 cases out of which 39(61%) were males & 25 (39%) females. The reason being that as males are bread earners and females usually doing household work, which makes the males more vulnerable to accidents, violence and stress & also males predisposed for risk taking behaviour

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Conclusion

This study helps to interpret different types of medico-legal autopsy cases, thereby providing an insight to the policy-makers, law custodians, and the community to look into the specific aspects of the cases and then to take proper measures to reduce mortality.

References

1. Vij K. Text book of Forensic Medicine & Toxicology: Principles & Practice; 2008. p. 24–5. Available from: <https://www.elsevier.com/books/textbook-of-forensic-medicineand-toxicology-principles-and-practice/vij/978-81-312-2684-1>.
2. Sections 174& 176 of the Code of Criminal Procedure, 1973. In: Basu's Criminal Court Handbook containing Criminal Major Acts, 10th ed 2007. Orient Publishing Company, New Delhi;; 1973. Available from: <https://indiankanoon.Org/doc/411677/>.
3. Kannan K, Mathiharan K, Ed. A Textbook of Medical Jurisprudence and Toxicology. vol. 295; 2012. p. 360. Available from: <https://www.amazon.in/Textbook-Medical-JurisprudenceToxicology/dp/8180387747>.
4. The Punjab Medical Manual, 2nd ed. 1933. Superintendent, Government Printing, Punjab, Lahore; App. XXXVII: CII, Chapter X, p. 154, Para 595.
5. Kannan K, Mathiharan K. Modi : a textbook of medical jurisprudence and toxicology. vol. 295; 2012. p. 360. Available from: <https://www.worldcat.org/title/modi-a-textbook-of-medicaljurisprudence-and-toxicology/oclc/880320241>.
6. Curran WJ. The Medico-legal autopsy and Medicolegal investigation. Bull N Y Acad Med. 1971; 47(7):766–75.
7. MEBansude, Kachare RV, Dode CR. Trends of unnatural deaths in latur district of Maharashtra. Journal Forensic Med. 2012;21(2):7–9.
8. Murthy MSN, Dutta BN, Ramalingaswami V. Coronary atherosclerosis in North India (Delhi area). J Pathol Bacteriol. 1963; 85(1):93–101. doi:10.1002/path.1700850109.
9. Kumar A, Singh TB, Pondey SK. A descriptive study on trend of unnatural deaths in Varanasi. Int J Curr Res. 2015; 7:14041–85.