

HISTOPATHOLOGICAL STUDY OF PRISONERS AUTOPSY VISCERA: A 3 YEAR STUDYC. V. Kulkarni¹, Ashok Panchonia², S. K. Dadu³, N. P. Tiwari⁴¹Professor & HOD, Department of Pathology, MGM Medical College, Indore, Madhya Pradesh.²Associate Professor, Department of Pathology, MGM Medical College, Indore, Madhya Pradesh.³Professor & HOD, Department of FMT, MGM Medical College, Indore, Madhya Pradesh.⁴Resident, Department of Pathology, MGM Medical College, Indore, Madhya Pradesh.**ABSTRACT****INTRODUCTION**

Studies conducted in few countries have shown that people in custody have increased rate of morbidity and mortality than those not in prisons. Many of these deaths are premature deaths and can be prevented with proper care and treatment. The present study was undertaken to examine Autopsy Viscera of prisoners and provide organ pathology pattern. A total of 459 cases of Autopsy Viscera were received in Department of Pathology, M.G.M. Medical College Indore, in which 40 cases were of prisoners. The study consists of 39(97.5%) males and 1(2.5%) females and their age ranged from 20 to 80 years. It was noted that the most common organ pathology is Tuberculosis 4(10%) followed by Pneumonia, Myocardial infarction and Malignancy 3 cases (7.5%).

KEYWORDS

Prisoner's death, Autopsy, Tuberculosis, Myocardial infarction, Chronic Pyelonephritis.

HOW TO CITE THIS ARTICLE: C. V. Kulkarni, Ashok Panchonia, S. K. Dadu, N. P. Tiwari. "Histopathological Study of Prisoners Autopsy Viscera: A 3 Year Study". Journal of Evidence based Medicine and Healthcare; Volume 2, Issue 51, November 26, 2015; Page: 8594-8595, DOI: 10.18410/jebmh/2015/1187

INTRODUCTION: Autopsy is otherwise referred to as postmortem examination or necropsy. It is an essential aspect of medical practice, which aims at auditing clinical practice in order to establish a final diagnosis and the probable cause or causes of death. Autopsy also allows physicians to correlate their clinical and laboratory findings with pathological changes that occurred in the patients.^[1,2] The benefits of autopsy include, evaluating the accuracy of diagnosis and the outcome of therapy. Findings of autopsy can enable the pathologist to alert the Infection Control Unit of a hospital on possible nosocomial infections especially contagious infections; the pathologist can also identify a hereditary condition that would require genetic counseling. This can be of help to grieving members of an affected family, who may have lost their loved ones to sudden deaths. Findings at autopsy also generate vital statistics needed for research as well as the provision of materials for the teaching of Anatomy, Histology and Pathology. This study was set to study Histopathological Viscera received in the Department of Pathology between 2012 to 2014.

Death of prisoners are usually associated with apprehension and community concern, and raises the suspicion of violation of human rights. If such death is due to natural cause then various issues such as negligence in providing medical aid or improper health care facilities etc. are raised. Correspondingly studies conducted in few countries have shown that people in custody have increased rate of morbidity and mortality than those not in custody.^[3,4]

Submission 28-10-2015, Peer Review 29-10-2015

Acceptance 04-11-2015, Published 26-11-2015.

Corresponding Author:

Dr. N. P. Tiwari, Room No. 9,

MGM PG Boys Hostel, Indore, Madhya Pradesh.

E-mail: narmadapdtiwari@gmail.com

DOI: 10.18410/jebmh/2015/1187

Many of these deaths are premature deaths and can be prevented with proper care and treatment.

In addition, having knowledge and data regarding such deaths is important to focus attention on prison medical services and can facilitate the implementation of preventive programs. Such studies would also guide the prison authorities in setting priorities for the allocation of their healthcare services and budget.^[5]

But for this purpose updated studies of morbidity and mortality are required and such data is lacking in India. Therefore, we undertook this study to examine Autopsy Viscera of prisoners and provide organ pathology pattern in this population.

MATERIAL AND METHODS: This is histopathology based Autopsy Viscera study conducted by the Department of Pathology, Mahatma Gandhi Memorial Medical College and Hospital, Indore. We received a sealed container containing target organs with seal namuna with the deceased's name, age, sex, date of death, date of post mortem and name of target organ. The received container contains organs or pieces of organs in 10% formalin solution. Then gross examination is done in which we noticed size, shape, consistency, colour, presence or absence of hemorrhage, necrosis, growth or other abnormalities. If present, then location, extent and relation with surrounding tissue are noted. After grossing and tissue processing H & E stained slides are studied under light microscope.

RESULTS: During the 3 year period, total 40 autopsies of prisoners were performed.

Age and Sex: The study population consists of 39(97.18%) males and 1(2.81%) females and their age ranged from 20 to 80 years. The main age group 21-30 and 51-60 both

constitute 10(25%) each. Among prisoners main Histopathological diagnosis is Tubercular lesion (10%), closely followed by malignancy, Myocardial infarction, Pneumonia (7.5%), liver cirrhosis and AIDS each (5%).

DISCUSSION: In legal parlance custody is defined as at any point in time when a person's freedom of movement has been denied by law enforcement agencies such as during transport prior to booking or during arrest, prosecution, sentencing and correctional confinement.^[6] However, the persons held in custody retain their basic constitutional right except for their right to liberty and a qualified right to privacy.^[7] The custodians are bound by the law to provide adequate basic amenities to ensure the health and safety of persons in their custody, including medical assistance and treating the inmates in a humane manner.^[6]

The person who is held in custody is totally dependent on his or her custodian for proper care and enough medical attention.^[8] Therefore, whenever death occurs in custody, a thorough investigation is needed.

This investigation will not only ascertain the cause and circumstances leading to death but many times will alleviate the anxiety and speculations of the relatives as to what might have happened inside a police or prison cell.

The most common age group of prisoners is 21-30 and 51-60. Each of these have 10 cases (25%) and in gender distribution in the case of prisoners only one case was female (3%) out of 40 cases.

Most common pathology in prisoners is Tubercular lesion (10%).

In our study cardiorespiratory failure was the cause of death in 83.8% of cases, while in Sreelaxmi, et al^[9] study 89.77% were male deaths. Maximum number of cases (39.77%) were seen in 21-30 followed by 31-40 (26.13%). Cardiac causes of sudden death accounted to 69.13%.

Among organ pathology considering lung pathology, Pneumonia (12 cases) was most common, closely followed by Tuberculosis (11 Cases), both disorders have wide age group distribution and most common age group is 41-50 years and more common in male prisoners.

Percentage of Tuberculosis in prisoners is high maybe because of overcrowding, poor nutrition, low immunity. The incidence of AIDS is more common in prisoners than non-prisoners. Persons suffering from AIDS are more prone to developing Tubercular lesion.^[10]

CONCLUSION: Prisoners deaths are among the most difficult and contentious deaths for investigation. The inmates in custody are a marginalized population that have poor access to healthcare in the community. The Magistrate inquest is conducted for all deaths in custody and is the only means of inquiry available to obtain information.

Unfortunately, the inquiry reels around the cause of death and nothing substantial surfaces regarding preventive aspects. The Article 21 of the Constitution of India enshrines the fact that no person shall be deprived of his life and personal liberty except according to the procedure established by the law. Though it is true that not every case of death in custody will be avoidable but it is possible to reduce the number of such deaths by preventive measures.

Infective conditions like Tuberculosis and Pneumonia reduced by improving living standards. Heart disease can be reduced by changing life-style and diet habit.

REFERENCES:

1. Jhamad R. Aanalysis of Custodial Deaths in New Delhi: A 13 years Study. J Indian Acad of Forensic Med, January-March 2014, Vol. 36, No. 1.
2. Bardale R, Dixit P. Natural Deaths in Custody: A 10 year Mortality Study. J Indian Acad Forensic Med., October - December 2011, Vol. 33, No. 4.
3. Fazel S, Benning R. Natural Deaths in Male Prisoners: A 20 year Mortality Study. Eur J Public Health 2006; 16: 441-4.
4. Wobeser WL, Datema J, Bechard B, Ford P. - Causes of death among people in custody in Ontario, 1990-1999. CMAJ 2002; 167: 1109-13.
5. Fruehwald S., Frottier P. Death behind Bars. CMAJ 2002; 167: 1127-8. J Indian Acad Forensic Med. October- December 2011, Vol. 33, No. 4 ISSN 0971-0973 331.
6. Bansal YS, Murali G, Singh D. Custodial deaths. An Overview of the prevailing healthcare scenario. J Indian Acad Forensic Med 2010; 32: 315-7.
7. Bardale R, Shrigiriwar M, Vyawahare MS, Dixit PG, Tayade SN. Death behind Bars: A five-year Study of Custodial deaths. Medicolegal Update 2005; 5: 10-12.
8. Young JG, Chiasson DA, Cairns JT, Payne-James J, Carter EJ - Custody and Restraint deaths. In: Payne-James J, Busuttil A, Smock W. (eds) Forensic Medicine – Clinical and Pathological Aspects, 1st Ed. 2003. Greenwich Medical Media Ltd., London;115-32.
9. Sreelakshmi K, Ashalatha N, S. Venkataraghava, et al. Evaluation of Histopathologic role in providing cause of death in sudden unexpected natural death. J Indian Acad Forensic Med. January-March 2014, Volume 36.
10. Dorman SE, Holland SM. Mutation in the signal-transducing chain of the interferon-gamma receptor and susceptibility to Mycobacterial infection. J Clin Invest. 1998;101:2364–236.