



Study of Decomposed, Mutilated Bodies and Skeletal Remains, Its Medico-Legal Aspect: A Daunting Challenge

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ABSTRACT:

Decomposition or putrefaction is the late change after death. It is characterized by degradation of the complex organic body tissues into simpler inorganic matter mainly by the actions of bacterial enzymes. Due to this decomposition process, it is very difficult to identify the dead body and it destroys many useful post-mortem findings. The whole body may be converted into a bunch of bones. Sometimes, criminals may mutilate the dead body to hide their criminal activity and identity of the person. In such circumstances, it becomes very difficult for the autopsy surgeons to establish the identity of the person, the cause of death and the times since death.

Keywords:

Decomposition, Mutilation, Skeletal remains, Identification

I. INTRODUCTION:

Putrefaction is a certain sign of Death.¹The disintegration of body tissues after death is known as decomposition.² Decomposition includes two processes i.e. Autolysis and Putrefaction. Decomposition is a slow process consisting of softening and liquefaction brought about by the digestive action of enzymes, released after death from tissue cells. Many factors such as temperature, moisture, airflow, age, disease condition, etc. may modify the process of putrefaction. As a result of putrefaction body soft tissues are disintegrated and practically human body is reduced to skeletons.

Mutilation is an act or instance of destroying, removing or severely damaging a limb or other body part of a person. According to Dorland's Illustrated Medical Dictionary, mutilation is defined as "the act of depriving an

individual of a limb, member or another important part of the body; or deprivation of an organ; or severed is figurement".³ There are varying motives behind mutilations, primarily to discard the body and/or aggravate identification, whereas others are performed to humiliate the victim, to carry out sexual acts, or as an expression of strong aggression or mental illness.^{4,5,6}

Sometimes only a part of body such as head, trunk or limb may be found. Body parts may be recovered from different areas. The act of mutilation may be unintentional, which may be caused by insects and animals, or intentional which is done by criminals with some motive.

II. AIMS & OBJECTIVES:

To know the cause of death and its manner whether suicidal homicidal or accidental and its medicolegal aspect.

III. MATERIAL & METHOD:

A mortuary based prospective study was conducted prospectively. The study includes cases brought to P.M.C.H. Patna from different districts of Bihar from November 2021 to November 2022. Relevant available information such as name, age, sex, approximate time since death and details history of the incidents were collected from the police in quest papers of the investigating officers and relatives. In some cases we visited the crime scene area and the place where such mutilated body parts or skeletal bones were recovered.

IV. OBSERVATION:

In majority of cases in decomposed bodies the cause of death was natural from chronic disease ailment such as severe infection of lungs, brain, abdominal disease and anemia. Unnatural cause of



death from shock and hemorrhage due to poly-trauma, fall from height, Blunt force impact injuries from as Sault, as phyxia from hanging, strangulation, drowning and decapitation injuries too. Few cases cause of death cannot be determined. Mutilated bodies and human skeletal

remains was either dismembered by heavy sharp cutting edged weapons or gnawed out by animals abandoned in field. The evident cause of death in such cases was unknown in majority followed by death from traumatic injuries, decapitated head injury etc.

Table1: Number of cases

Decomposed Bodies	Mutilated body	Skeletal remains	Total cases
53	35	28	116

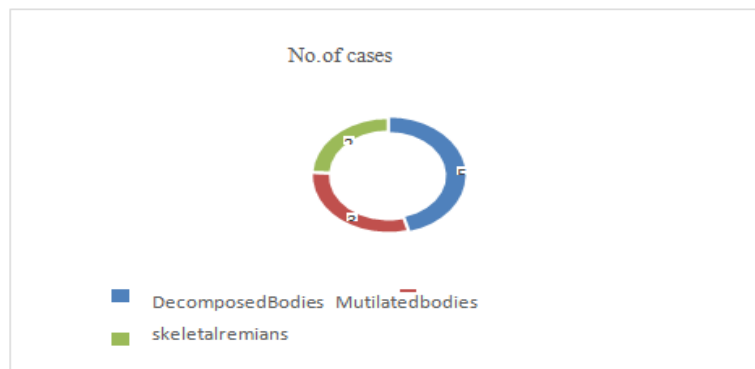


Table2: Sex distribution

SEX	Decomposed	Mutilated	Skeletal	Total
Male	41	21	19	82
Female	12	13	9	34

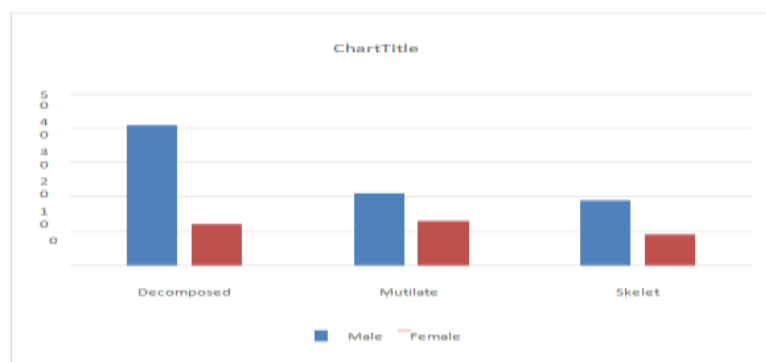


Table3: Age Distribution

Age Group	Decomposed	Mutilated	Skeletal remains	Total
0-10	1	0	1	2
11-20	6	5	1	12



21-30	10	11	16	37
31-40	10	2	2	14
41-50	8	8	5	21
51-60	7	5	4	16
61-70	6	4	0	10
71-80	3	0	0	3
81-90	1	0	0	1

Table4: Cause of death in Decomposed Bodies

Cause of death in Decomposed Bodies	Number of cases	Percentage
Natural Disease Process	20	37.73
Polytrauma	11	20.75
Hard blunt object and its impact	6	11.32
In determined	6	11.32
Asphyxia	5	9.43
Burn	4	7.54
Decapitation	1	1.88

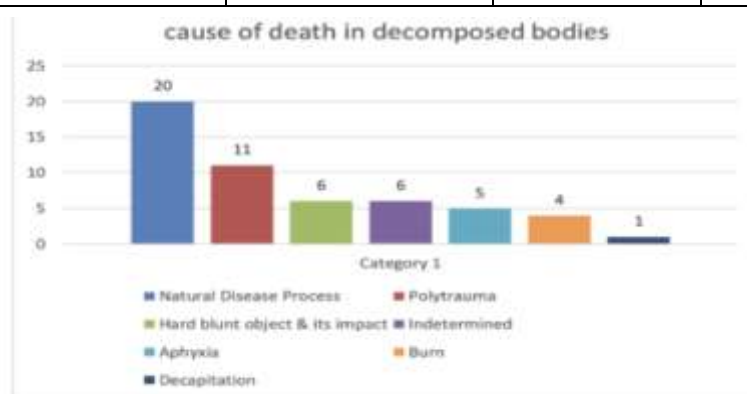
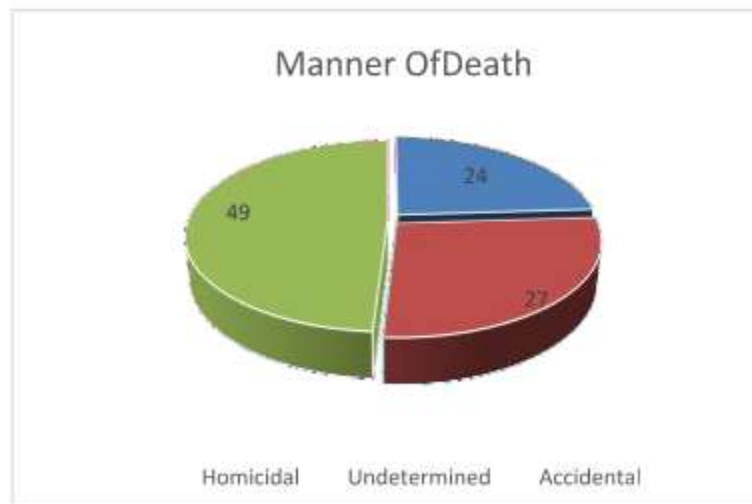




Table No.5: Manner of death

Manner Of Death	Number of cases	Percentage
Homicidal	24	20.68
Undetermined	27	23.27
Accidental	49	42.24



V. DISCUSSION:

In the present study the incidence of decomposed body, mutilated body & skeletal remains were 19.5% of the total autopsy conducted during the specified time period. So far the sex is concerned, the male sex outnumbered the female with a figure of 82 cases against 32 cases of female. Male dominance was also reported by studies conducted by Rao D^{7,8,9}

Most frequently involved age group consists of 21-30, 31-40 & 41-50 years. People in these age groups are active & frequently involved in outdoor and criminal activities. The incidence decreases with younger as well as elder age group people. Similar findings were also observed by Ambade V Netal.¹⁰

Problems due to decomposition, such as artifacts and alteration of postmortem tissues were major challenges. Similar observation was reported by By ard and Butzbach.¹¹ The highest percentages of deaths were found in the bloating and marbling states. Cockle (1993) observed in Canada that the active decay and adipose reformation represented (2.5 and 4.5%) respectively.¹² Job (2007) in India observed discoloration, marbling and skeletalization in (22.7, 51.1 and 1.4 %) respectively; and Pope (2010) in USA observed

bloating, advanced decay and mummification in (34.6%, 14.8% and 6.2 %) respectively. Such variance could be attributed to the climatic changes.

VI. CONCLUSION:

The study focused on study of Death and its Medico legal aspect. Due to lack of report of scene of crime, in capacitance of providing vital information by Investigating officers pertaining to circumstances leading to death poses a great challenge for auto pysurgeons to arrive at logical and Definitive conclusions. The Police should possess Sensitiveness and Professionalism nits approach with respect to Decomposed Mutilated bodies in large interest of Natural justice.

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