



## KNOWLEDGE AND AWARENESS OF FORENSIC ODONTOLOGY AMONG THE DENTAL PROFESSIONALS

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### ABSTRACT

During emergency posting and casualty, Doctors deals with injury cases either patient came to OPD or brought by the police. Though injury may be accidental, suicidal, homicidal or self inflicted. When there is allegation or suspicion of assault, both the medical officer and Dentist besides treating the patient, is legally bound to examine the patient and give opinion regarding the injury. This information is filled in the prescribed proforma i.e. Injury report for the aid of investigating police agency and administration of justice in the court of law. Bodily injuries found on the alleged victim are classified into simple or grievous injury. Under Section 320 IPC enumerates grievous hurt. The present paper is an attempt to create awareness of Forensic Odontology among the Dental professionals.

**KEYWORDS:** Awareness, Dentists, Forensic Odontology, Knowledge, Grievous injury.

### INTRODUCTION

“Forensic” originated from Latin word “forensis” from “forum,” which means a place where legal matters are discussed.<sup>[1]</sup> The science of dentistry which deals with the law is known as forensic dentistry or forensic odontology.<sup>[2]</sup> Forensic odontology is a specialized field of dentistry which deals with legal problems associated with dentistry. Forensic odontology can be defined as the branch of dentistry that addresses the proper handling and examination of dental evidence and the evaluation and presentation of dental findings in the interests of justice.<sup>[3]</sup> The first forensic dental identification in India was reported in a review conducted by Sansare and Dayal in 1995.<sup>[4]</sup> Forensic odontology plays an important role in criminal, monetary disputes, marital, social, burial, and the identification of individuals missing for prolonged periods.

### DISCUSSION

The focus of the present article is on the knowledge, awareness, and practice of forensic odontology among dentists in India. Forensic dental investigation mainly depends upon the availability of antemortem records and therefore dental records prove to be a very useful tool in such cases.<sup>[5]</sup> Therefore, it calls for the social responsibility of each dentist to main complete dental records of their clients that can serve as an important

source of information in the event of any mishap. Teeth and associated structures have played a major role in forensics. The history dates back to 66AD when he first victim was identified using teeth. To the recent incidents, in where bite marks had the potential to serve as corroborative evidence that supplemented fingerprints and DNA.<sup>[6]</sup>

The doctor can receive the medico legal cases such as

1. After incident patient reporting to the hospital.
2. Patient brought by the police for examination after a injury.
3. For the expert management Patient referred from other hospital after registering the medico legal case.
4. The fracture of a bone or tooth is considered as grievous injury. Some fractures might be visible only radiograph and it might or might not be associated with dislocation and functional impairment of the tooth. Any break in the continuity of a bone or tooth that is appreciable on a radiograph can be treated as fracture. Grievous injury<sup>[7]</sup> is one in which fracture might affect only the outer table of bone or the cortical portion, considering the pain and disability and tooth that has become loose for the same reason.
5. The modifying Ellis classification and criteria and scoring for TDI (Ellis RG et al, 1970)<sup>[8]</sup>

Code	Criteria	Description
0	No trauma	
1	Enamel fracture	Simple fracture of crown, enamel only involving little or no dentine
2	Enamel and dentine fracture	Extensive fracture of crown involving considerable amount of dentine but with no pulp
3	Enamel and dentine fracture with pulp	Extensive fracture of the crown involving considerable amount of dentine and exposing dental pulp
4	Non-vital tooth with discoloration	Traumatized tooth that is non vital, and is discoloration with or without loss of crown structure
5	Displacement	Extrusion, intrusion, lateral displacement
6	Total loss tooth	Absence of tooth due to complete ex-articulation

Under section 320 of the IPC the following kinds of hurt have been classified as grievous hurt.<sup>[7]</sup>

- i. Emasculation.
- ii. Permanent privation of the sight of either eye.
- iii. Permanent privation of the hearing of either ear.
- iv. Privation of any member or joint.
- v. Destruction or permanent impairing of the powers of any member or joint.
- vi. Permanent disfiguration of the head or face.
- vii. Fracture or dislocation of a bone or tooth.
- viii. Any hurt which endangers life or which causes suffering during the space of twenty days in severe

Sec. 320 IPC enumerates grievous hurt.<sup>[9,10]</sup> bodily pain, or makes him unable to follow his ordinary pursuits.

Fracture or dislocation of a bone or tooth causes great pain and suffering to the injured person. For this clause it is not necessary that a bone should be fractured through and through or that there should be a displacement of any fragment of bone.

Although fracture has not been defined in sec 320 IPC, but as per Supreme Court judgment in the case of Hori Lal and Anr vs. State of U.P. (1969), incised wound to the bone is to be considered as fracture, hence, grievous hurt.<sup>[7]</sup>

Sr.No	IPC Section	Description of Injury
1	304A	Negligent homicide e.g. Death on Dental chair
2	336	Extracting a tooth for a patient with valvular Heart disease without antibiotic prophylaxis against endocarditis. ( even endocarditis not develops)
3	337	Causing simple injury .e.g. pain and swelling after extraction due to negligent extraction.
4	338	Fracture of jaw during extraction due excessive or improper force.

It is important for the dentist to be aware of these liabilities.

## CONCLUSIONS

Dentists are often ignorant about the laws governing their profession. This article is an attempt to give simple explanations of various laws and legal issues affecting dentists. The legal process is difficult and distressing to navigate, so it is best to avoid this when possible.

## REFERENCES

1. Puerini SJ. Forensic odontology and the postmortem identification process. *Med Health R I.*, 2005; 88: 308–9.
2. Singh K, Anandani C, Bhullar RK, Agrawal A, Chaudhary H, Thakral A. Teeth and their secrets- Forensic dentistry. *J Forensic Res.*, 2012; 3: 141.
3. Sheikh S, Pallagatti S, Singla I, Gupta R. Postmortem Dental identification in the absence of anti-mortem records-a review. *J Forensic Res.*, 2011; 2: 132.
4. Sansare K. Forensic odontology, historical perspective. *Indian J Dent Res.*, 1995; 6: 55–7.
5. Preethi S, Einstein A, Sivapathasundharam B. Awareness of forensic odontology among dental practitioners in Chennai: A knowledge, attitude and practice study. *J Forensic Dent Sci.*, 2011; 3: 63–6.
6. Cantu M, Coppola M, Lindner AJ. Evaluation and management of the sexually assaulted woman. *Emerg Med Clin North Am.*, 2003; 21: 737-50.
7. Atal, DK; Naik, SK; Das, S (April–June 2013). "Hurt & Grievous Hurt in Indian Context" *J Indian Acad Forensic Med.*, 4 September 2014; 35(2): 160–164. Retrieved.
8. Ellis RG, Davy KW. The classification and treatment of injuries to the teeth of children. 5th ed. Chicago: Yearbook Medical Publishers, 1970.
9. Dhawan R, Dhawan S. Legal aspects in dentistry. *J Indian Soc Periodontol*, 2010; 14: 81-4.
10. Bhullar DS, Gargi J. Medical negligence-majesty of law-doctors. *J Indian Assoc Forensic Med.*, 2005; 27: 195-200.