DOI: 10.7860/JCDR/2014/10473.5206

Forensic Section

Importance of Denture Marking for Human Identification in Forensic Odontology

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The perpetuators of crime are on the rise despite the advances in science. Therefore, the aim of Forensics is to act smartly. According to American Board of Forensic Odontology Guidelines, most dental identifications are based on restorations, caries, missing teeth and/or prosthetic devices. In edentulous patients where teeth are unavailable and bone resorption is high, no consistent features are available for comparison of ante mortem and post mortem radiographic analysis [1]. In geriatric and nursing homes, the necessity of labelling increases manifold, where inadvertent exchange or loss of dentures is possible due to cleaning by the nursing staff. It also aids in identification in patients suffering from memory loss and thus save the trouble to the elderly who may have difficulty in adjusting to new set of dentures. Therefore, patient's prosthesis; a denture that is labelled is the best chance for easy identification.

Denture labelling is now legally accepted in countries such as Sweden, Scandinavia and in 21 out of 50 states of America [1]. However, in most developing countries, very little is known about its advantage and its necessity to most dental practitioners, technicians as well as patients. According to a survey in Australia, no practitioner labelled the dentures routinely, for cost, lack of awareness of standards and recommendations and a belief that it was of little importance [2]. The Swedish ID band has become the international standard and FDI accepted denture marking system. It is a SS metallic band incorporated into acrylic containing a personal number i.e. a combination of birth date, birth number and sex [3]. The information to be incorporated in a label varies from basic necessity i.e. patient's initials and date of birth to patient's preference. Matsumura suggested marking the telephone country code number, abbreviation of the dental clinic placed on the metal framework to be incorporated into the denture [4]. Ling BC & Nambiar P (1996) proposed using a country's code prefixed with a hyphen (-) before the identity card number to indicate the origin of the individual more clearly [5]. All countries have unique identification numbers for its individuals. Their social security number, income tax

[Table/Fig-1]: Various methods of denture marking including Surface (engraving and marking) and Inclusion methods (paper, OHP sheet, lead foil, barcode, brass palette, Stainless Steel matrix band, Nickel Chrome plate)

file number, driving license number or like in India the Aadhar card number issued by the Unique Identification Authority of India (UIDAI) can be used as denture labels.

Dentures can be labelled either on the surface by engraving, embossing and marking or a label can be inserted in a recess created on the posterior palatal slope of the maxillary denture and posterior lingual flanges of the mandibular dentures of the size of the label to be inserted and covered by clear self – cure acrylic resin. Due to clear acrylic, the label information could easily be read [Table/Fig-1].

The advantages of denture labelling are widely rooted ranging from prosthesis identification to patient identification to maintenance of record and its retrieval when necessary. The awareness for such a system which is helpful not only in medico-legal cases but also in care institutes to prevent misplaces needs to be developed. Patient education and awareness in this direction can only be achieved if there is an appropriate framework for this in dental education to educate students and technicians first. Patients receiving partial and complete dentures should be informed and given the choice of opting for labelling their dentures. At the same time Dentists treating them could contribute greatly by using such simple means to help maintain a person's identity.

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FINANCIAL OR OTHER COMPETING INTERESTS: None.

Date of Submission: Jul 02, 2014
Date of Peer Review: Aug 08, 2014
Date of Acceptance: Sep 16, 2014

Date of Publishing: Nov 20, 2014