

Relationship between the Mandibular Third Molars with Inferior Alveolar Canal and associated Dysaesthesia

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Abstract

Background: It is not uncommon to find one of the Mandibular third molars in close proximity to the Inferior Alveolar Canals and surgical procedures in such area will sometime result in injuries to the Inferior Alveolar Nerves. The clinical manifestations of such injuries may vary from mild tingling sensations (paraesthesia), abnormal touch sensations (Dyaesthesia) to severe loss of sensations (anaesthesia) in the areas supplied by Inferior Alveolar Nerves depending upon the damage to the nerve bundle. This article tries to establish the cause and relationship between the mandibular third molar extraction and associated neurological complications as a result of damage to Inferior Alveolar Nerves. **Aims and objectives:** To statistically associate relationship between mandibular third molars to the Inferior Alveolar Canal and surgical extraction of third molars with mandibular nerve dysaesthesia. **Materials and Methods:** Previous records of patients were reviewed that included the preoperative panoramic radiographs, complete operative and anaesthetic records, preoperative and postoperative notes, medical histories and pre and postoperative neurological signs and symptoms. Data was then tabulated and the cases of altered sensation were compared with cases of unaltered sensation for immediate after extraction, 7 days after extraction to 7 months post operatively. **Results:** 105 patient previous records were evaluated between February 2011 to January 2012 in SMBT Dental College and Hospital Sangamner, Maharashtra. Panoramic radiographic images of about 105 patients showed close approximation between roots of third molars and Inferior Alveolar Canal. There was nerve Dyaesthesia/paraesthesia seen in 24% post-operatively, out of which 24% was seen after 7 days and in 13% after 7 months. **Conclusion:** The Inferior Alveolar Nerve Dyaesthesia/paraesthesia was seen in the patients showing close approximation of nerve with root apices. However paraesthesia was not permanent, in 50% of the patients and nerve sensation were regained within 6 months post-operatively. This indicates that the presence of mandibular third molar roots close to Inferior Alveolar Canal increases the surgical risk of potential complications.

Key Words : Inferior Alveolar Canal, Mandibular Third Molars.

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