

DISCUSSION:

Impacted tooth is one of the most common clinical complaints in routine dental practice. Periodic studies are required in this area to have an updated knowledge of the prevalence, pattern of impaction and the sequelae of symptoms that follow impaction ranging from simple pericoronitis to odontogenic cysts and tumours. This present study was planned as a pilot study to study the prevalence of impacted teeth in a hospital going population with a larger sample size over the following years. There are different methods by which the prevalence of impacted teeth is studied, radio graphical study is the most common amongst them. This study was done in a hospital as the population is usually diverse and is representative of the population in that area.

In the present study the prevalence of impacted third molar was found to be (58%) which is higher as compared to other studies. This high prevalence rate may be due to the age group of the patients in the present study that range from 19 years to 75 years compared to other studies that involved a wider age group of patients. Third molars was found to be the most common impacted teeth in accordance with those that are previously reported in literature^(3,4,10) This may be because of evolutionary decrease in the size of the jaws owing to lack of space and causing the impaction of the third molar teeth which are chronologically the last teeth to erupt. Maxillary canine (3.03%) was found to be second most commonly seen impaction in accordance with that are previously reported in literature^(3,11). This may be due to the long eruption path of the maxillary canine. Impaction of the canine causes over eruption of the mandibular teeth and causes malocclusion of the maxillary arch. The relation of the impacted maxillary canine by virtue of its long root and the floor of the maxillary sinus is a critical feature considering the possibility of creating an oro-antral fistula during its removal.

Our study revealed that impaction is more common in the mandible(69.90%) which is similar to the results obtained by Saglam et al, FCS Chu et al, Dhuha Al Feeli et al.

^(4,10,11) The discrepancy in impaction between the jaws is important, as presence of impaction only in one arch would leave an unopposed tooth. This could cause over eruption, periodontal problems and temporo-mandibular joint problems. In the mandible, impaction was more common in the third quadrant (35.92%) which is similar to the findings of the study done by Dhuha Al Feeli et al⁽¹¹⁾.

The present study did not show any significant gender predilections. The ratio of occurrence of impacted teeth in males and females was 1:1 which is in agreement with the study done by Aitasalo et al⁽¹²⁾. This implies that the jaw length tooth size discrepancy is common to both the genders. In the mandible, among the type of impaction, Horizontal impactions (36.40%) were the most common

type of impaction. This could lead to the difficulty of removal of the impacted tooth, bone loss and root resorption of the adjacent teeth. It could also represent a change in the orientation of the developing tooth germ brought about by forces generated either during jaw growth or from the other developing teeth in the vicinity.

In the maxilla distoangular type of impaction is most common (70.58%) which is in agreement with the study done by Mohammad Mehdizadeh et al.⁽³⁾

In the present study 20% of the population presented with associated bone loss and 6.08% had root resorption in the second molar. Root resorption was rarely seen but when present was mostly associated with horizontal impaction of the third molar.

CONCLUSION:

The present study revealed that impaction is a common finding in a dental office. The progressive stage of evolutionary agenesis is yet to set in. The importance of this finding is the early diagnosis and prompt prophylactic or therapeutic treatment that would benefit the patient community.

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