

Predicting, Preventing, and Treating Canine Impactions

Maxillary canine impaction is a common and often preventable occlusal disturbance, occurring in between 1-3% of the general population. Often, this condition is diagnosed after canine development is complete, leading to the need for costly and extensive surgical and orthodontic treatment. Early recognition and detection are important to improve the chance that a predicted impaction can be avoided more easily with less invasive techniques. Clinical observation, palpation, and recognition of associated anomalies can be helpful for identifying patients who are more likely to experience canine impaction. Radiographic analysis to view the location and orientation of the canine, as well as proximity to adjacent tooth root structure, provides more definitive diagnosis of the condition. Once recognized, primary tooth extraction, maxillary expansion, and headgear therapy have all been advocated as relatively simple and non-invasive methods to induce canine eruption without further surgical and orthodontic interventions. In this presentation, the scientific evidence supporting and refuting various methods for predicting, detecting, and avoiding development of maxillary canine impactions will be reviewed and discussed.