Abstract: Canines are important teeth in the facial beauty and function of the dentition while buccally and palatally displaced maxillary canines are one of the most frequently encountered conditions in the orthodontic treatments. The etiology of palatally displaced canines is not fully understood, however, presence of other dental anomalies or genetic role have been discussed on it.

The objective of this study was to investigate the dental and occlusal features of the patients with palatally displaced maxillary canines and their controls in the Orthodontic Department of Qazvin Dental School and private clinics.

In this study, 50 casts of the patients with palatally displaced maxillary canines and 50 casts of age and gender-matched controls with normal canine eruption were selected and studied. Different variables regarding dental and occlusal features of the two casts' categories were measured.

The mean mesiodistal and buccolingual width (cases: 26.5mm, 36.3mm, controls: 27.6mm, 37.4mm), palate height and TM (cases: 17.9mm, 85.6mm, controls: 19.1mm, 88.3mm), and mandibular MD (cases: 78.3mm, controls: 82.8mm) were significantly higher in patients with palatally displaced canines than controls. Higher frequency of dental anomalies and missing (16% vs. 0%), and impacted teeth (94% vs. 0%) were observed in cases compared to controls. No significant differences were observed between two groups regarding mean intermolar width, intermolar width, occlusal relationships, overbite, overjet and the Howes' measures.

It was shown that patients with palatally displaced maxillary canines had smaller teeth dimensions and the frequency of anomalous or missing teeth was higher in them when compared to normal canine eruption patients.

Presentation: Poster