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## RELATIONSHIP BETWEEN THE MAXILLARY CANINES IN AN ECTOPIC AND VARIATION

## OF THE DIAMETER OF THE TEETH

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**Aim.** A tooth is impacted when its apex is formed but does not erupt as expected during the physiological timeframe of eruption. Maxillary canines, after the third molars are the teeth that more

frequently show alterations of their eruptive process.. Maxillary canines can be positioned in ectopic

palatal or buccal position. In recent years, an extensive search of the literature has shown a correlation

between the palatal ectopic eruption of the canine and size of the dental elements reduced. Purpose of

the study was to investigate a relationship between ectopic eruption of the canine oral, dental crowding

and increased diameter of the teeth.

Materials and methods. In this study a sample (49 patients of both sexes), aged between 19 and 80 years

was selected. It was carried out in among patients of the Section of Orthodontics, Department of Surgical, Oncology and Stomatologic Sciences, University of Palermo, Italy. The inclusion criteria for the

selection of the sample are: aged 12 to 18 years, mean age 14 years old, both sexes, presence in the

arch of the maxillary canines, presence of tooth agenesis, presence of dental crowding, ectopic buccal

erupted maxillary canines. Exclusion criteria were age under 12 years, partially edentulous, including

teeth, delayed eruption, the presence of other teeth in ectopic location. All patients fulfilling the inclusion

criteria had one or both maxillary canines in ectopic buccal position. another control group of both sexes

with maxillary canines correctly positioned in the arch; measurements were made of the diameters mesial-distal of the teeth of both jaws., on plaster models of the dental arches. Statistical analysis was

conducted using test T Student. The significance level was set at p<0.05. The acquired data refer to the

mean values of the measurements for every –established parameter. The values of the phases of the

study with one or both or without maxillary canines in ectopic buccal position were compared. **Results.** The results show a significant reduction (p < 0.05) the diameter of the elements in female patients

with both the maxillary canines in ectopic buccal position. In patients of both sexes with one maxillary

canine in ectopic buccal position the changes in the mesial-distal diameters of teeth are not statistically

significant.

**Conclusions.** The statistical analysis, first, confirmed the presence of a sexual dimorphism, not only among

the patient without maxillary canines in ectopic position, which was predictable confirmation of this difference in the size of the teeth between the sexes. Also the patient with canines in ectopic position

showed a sexual dimorphism. In female patients with dental crowding is possible to recognized an eruption ectopic because of the increased diameter. If the displacement of the canines is detected

early, the clinicians should then focus on the means of preventing a possible impaction.