

Maxillary incisor root forms in orthodontic patients in Nairobi, Kenya.

Abstract:

OBJECTIVE: To evaluate, radiographically, the root forms of maxillary incisors in a sample of patients seeking orthodontic treatment in Nairobi, Kenya. **DESIGN:** A retrospective study of maxillary incisor root forms based on periapical radiographs. **SETTING:** A private dental clinic in Nairobi, Kenya. **MATERIALS AND METHODS:** The study comprised 393 maxillary incisors in 100 consecutive subjects (51 boys, 49 girls) aged 9-24 years. Intra-oral periapical radiographs of the incisors were evaluated. An index was used to categorise the roots as follows: 0=normal, 1=short, 2=blunt, 3=apical bend, 4=pipette apex. **RESULTS:** Normal root form was recorded in 60%, short in 12.5%, blunt in 7%, apical bend in 13%, and pipette-apex in 7% of the roots. Sixty nine percent of the pipette-apex roots were in central incisors and 94% of the roots with apical bend were in lateral incisors. Seventy three percent of short roots were in females. **CONCLUSION:** Based on evidence from previous studies on risk of root resorption which indicates that pipette and blunt roots are the forms mostly involved in this phenomenon, the present data imply that about 14% of the roots may have been at risk of moderate to severe resorption during fixed orthodontic treatment.