Abstract

Aim: The aim of this study was to assess the size of upper incisors and canines in patients with gaps in the upper dental arch especially medium gap between upper central incisors. Material and methods: Diagnostic orthodontic models of 30 adult patients with full permanent dentition with diastema in the upper arch were studied. Patients with severe malocclusion, missing teeth and periodontal disease were excluded. Width to length ratio of the clinical crown of the central, lateral incisors and canines for both sides was measured. Together 180 teeth were tested. The results were compared with the values ​​indicated by Sterrett et al. Results: In all patients, the clinical crowns of central incisors were symmetrical. In most cases, a higher width/length ratio was found what indicate that the clinical crowns of medial incisors were too broad in relation to the length. Lateral incisors: In most cases, the rate was the same for the right and the left side however a few patients had asymmetry of lateral incisors. Most of the lateral incisors had higher width/length ratios, whath means that they were wider than longer, some had a reduced rate and only in one case ratio was proper. Canines were also asymmetrical, and none of the canine exhibited perfect proportions. The vast majority showed increased ratio of the width to the length of the clinical crown. In several cases, the result was lower. Conclusions: Patients with gaps between the teeth have abnormal width/length ratio of the clinical crowns of the upper front teeth. The values ​​of the majority were increased, what indicates that the front teeth were wider than longer in patients with gaps. Moreover despite the disturbed width/length proportions central incisors remained symmetrical. In contrast, lateral incisors and canines more often exhibited asymmetries.

Key words: teeth size, width /length ratio, diastema