Evaluation of the Golden Proportion and Golden Standard of Maxillary Anterior Teeth in Relation to Smile Attractiveness

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Abstract : Objective: This study aimed to explore the existence of golden proportion (GP) between the widths of maxillary anterior teeth and golden standard (GS) for width to height ratio of maxillary central incisor in individuals with attractive and non-attractive smiles. Materials and methods: A total of 82 females were recruited and divided into 2 groups: attractive smile (n= 41) and non-attractive smile (n= 41). Frontal photographs were taken, scanned, and saved on a personal computer. The apparent mesiodistal width of each anterior tooth was measured. The data were analyzed using the appropriate statistical tests at p-value < 0.05. Results: Frequency of GP was very low among the total sample, and most proportions were higher than GP. No significant differences were found between both groups in relation to central-to-lateral ratio while significant differences were found in relation to canine-to-lateral ratio. Similarly, most proportions of width to height ratio were higher than GS. Difference between groups was significant for left side and for both sides (p < 0.05) but was not for right side (p > 0.05). Conclusion: Frequency of golden proportion was very low among the study population. Smile attractiveness is not related that much to the proportions between the teeth.

Keywords : golden proportion, golden standard, attractive smile, esthetic, anterior teeth

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