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## Epidemiologic panorama of dental occlusion

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### ABSTRACT

The purpose of this study was to explore the possible significant sex difference in occlusion, provide information about the occlusal variation among Egyptians, and present an epidemiologic panorama of dental occlusion among different ethnic world populations. The hypothesis was that the occlusal variation is not independent of sex.

A sample of 501 female and male adult subjects was studied. Normal occlusion, Angle's classification of malocclusion, and the Dewey-Anderson modifications for typifications were recorded. Chi-square tests were used.

The results obtained from this study indicate that a significant sex difference in occlusion exists for normal occlusion, Angle Class I, and Angle Class III. Further, considering an anterior crossbite as the sole indicator of an Angle Class III malocclusion is erroneous; an anterior crossbite may exist in other classes, and Angle Class III type 1 (edge-to-edge) is more prevalent than either Class III type 2 (normal anterior overbite) or type 3 (anterior crossbite). Although numerically different, occlusal variation follows a universal general distributional pattern for most world populations. Some speculations are presented for clinical implications and for research suggestions.

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**KEY WORDS:** Occlusion epidemiology, Sex difference in occlusion, Occlusal variation, Panorama of dental occlusion, Preventive orthodontics.