

Risk Factors and Epidemiological Aspects of Cleft Lip and Palate and Associated Orthodontic Anomalies in Western Algeria

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Abstract : Introduction: Cleft lip and palate are the most common congenital malformations of the orofacial sphere, accounting for one in every 700 births worldwide. They have a multifactorial origin, requiring multidisciplinary intervention from birth to adulthood. In the absence of work in Algeria on this pathology, we undertook a study to describe the epidemiological aspects and determine the risk factors. Methodology: This is a cross-sectional descriptive study from February 2018 to June 2021, including all cleft patients referred to and or followed up for management at the ODF/ CHU d'Oran department. Results: 260 patients were included. Males predominated (sex ratio=1.17). The mean age of the patients was 1.65 ± 2.6 years, most of whom lived in Oran. The mean age of the mothers was 32.5 years, and 37 years for the fathers. More than half of all cases had cleft lip and palate, with a predominance on the left side. Consanguinity was found in 20%. Mothers had more medical history than fathers. Stress, emotional shock, active smoking in the father, low socio-economic status, and vitamin deficiency in the mother were the most common factors. Both dentitions were affected by various dental anomalies, the most frequent of which was a numerical anomaly (31.6%), followed by the delayed eruption (23.1%) with the absence of inclusion and transposition. All functions have been disrupted to varying degrees, depending on the severity of the damage. Because of the anatomical and physiological characteristics of clefts, any disturbance during embryogenesis alters the course of the latter, leading to congenital anomalies. Conclusion: The study enabled us to draw up a profile of cleft lip and palate and to identify certain risk factors to guide the main lines of prevention.

Keywords : cleft lip and palate, dental anomalies, risk factors, orthodontics

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