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Prevalence of consanguineous marriages between parents of individuals with cleft lip and/or palate

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Background: Cleft lip and palate are the most common congenital craniofacial deformities seen in children and present a complex etiology involving genetic and environmental factors. The occurrence of orofacial clefts in the world varies with frequency of 1-2.2/1000 live births, and in Brazil it is around 1 for 650 live births. Environmental factors related to orofacial cleft are associated with maternal health and habits during pregnancy. Regarding genetic/hereditary factors, the issue of familial recurrence and consanguineous marriages are highlighted. Consanguineous marriage is traditional and respected in same communities of North Africa and West Asia. In Brazil, the consanguineous union are heterogeneous and there are few studies verifying the relation between intra-familial union and the occurrence of the orofacial clefts.

Aims: The objective of this study was to verify the prevalence of consanguineous marriages between parents of subjects with non-syndromic cleft lip and/or palate and to investigate whether there could be an association between consanguineous unions and the severity of the cleft.

Methods: This study was funded by retrospective study analyzed 1179 medical records of patients with confirmed diagnosis of non-syndromic clef lip and/or palate, treated in a Brazilian reference hospital. The information about consanguineous union between the parents and the type of cleft were obtained by analyzing the medical records.

Results: A total of 1179 medical records were evaluated and all contained the information regarding consanguineous marriages among parents. Of these, 30 cases of consanguinity were found between parents being that 19 patients were male and 11 were female. The degree of kinship that prevailed was consanguineous union between first degree cousins, with fourteen cases; followed by cousins of second degree, with nine cases; three cases between cousins of third degree; three cases where the degree of kinship was not informed; and a case between uncle with niece. The most frequent type of cleft was isolated cleft palate with 12 cases (40%); in second, cleft lip and palate with 10 cases; in third, isolated cleft lip with 8 cases.

Summary/Conclusion: It was observed a prevalence of 2,54% of consanguineous union among parents of subjects with non-syndromic cleft lip and palate. The kind of cleft that prevailed was isolated clef palate and the male was the most affected with these orofacial anomalies. We didn't find a positive association among intra-familial union and the severity of the cleft. These results are within the expected rate of consanguineous marriages in this population studied. **Financial Support:** FAPESP.