

Evaluation of Genetic Profile of Cleft Lip and Palate Patients Assisted at the Dental Care Center for Special Patients – NAOPE, University of the State of Amazon

Rodrigues, R. S. , Frazão, C. L., Borges, C. T., Oliveira, R. F., Silva, D. E. V., Souza, R. C. G., Saito, C.P.B.¹

¹Escola Superior de Ciências da Saúde, Universidade do Estado do Amazonas

Introduction: The etiology of cleft lip with or without cleft palate and isolated cleft palate, not syndromic, has the genetic and environmental factors as determinants, which interact to the appearance of the anomaly. Recent studies have identified susceptibility sites in genes such as TGF α , MTHFR and MTR, last two involved in folate metabolism, that may play an important role in the etiology of cleft lip and/or palate. However, these important studies were conducted only between Caucasians and among those born in the southern Brazil. **Objectives:** Provide new data on the genetic pattern in association with environmental factors related to the anomaly of individuals born in northern Brazil. **Material and Methods:** Patients included in this study were diagnosed Spina rating, and was used as exclusion criteria the presence of associated syndromes. All patients were submitted to a questionnaire on the use of medications such as folic acid, as well as mothers's smoking habits during any periods of pregnancy. The DNA of 58 samples was obtained through extraction from saliva. **Results and Discussion:** 40.74% had involvement of the left side; 24,1 and 29.4 years old was the average of mother and father's age respectively; 97.8% of cases said to have been born in the urban area and 2.2% in rural areas; the use of vitamin supplements accounted for 60%; 31.1% reported having smoked or lived with someone who smoked and 88.9% said they did not drink any alcohol; 24.4% said yes about mother's miscarriage. After the extractions were obtained fine quantification values (mean:31.9ng/ ml)**Conclusion:** It is possible that environmental factors are the most prevalent in determining this malformation in this region, however, we can not rule out the possibility that genetic related factors ethnic differences (pending results of this phase) may explain the higher proportion isolated cases in this region

Aknowledgments: FAPEAM –Fundação de Amparo à Pesquisa do Amazonas, Núcleo de Atendimento Odontológico à Pacientes Especiais –NAOPE

Keywords: Cleft Palate; alpha transforming growth factor; MTHFR and MTR genes; environmental factors