

## Microtia in Central America

### Microtia Prevalant in Central America

Our mission trips are organized to target areas in Central America where Microtia is very high, namely in Ecuador and Guatemala. There is significant medical need in these area as is shown in a medical study conducted in Quito, Ecuador.

### Medical Study of Microtia in Ecuador

A high frequency of microtia, a congenital birth defect in which the ear is not formed, was detected in Quito, Ecuador by the Latin American Collaborative Study of Congenital Malformations (ECLAMC) and the data available on file was used to define the cluster and to test some potential risk factors.

The Quito study consisted of 46,041 live births from two hospitals. The rest of the sample consisted of 553,068 live births from 58 hospitals located in 24 cities of other South American countries. The observed prevalence rate for microtia was over five times higher in Quito (17.4/10,000) than in other cities (3.2/10,000).

The microtias from Quito were mostly represented by isolated forms (without other anomalies except for preauricular tags and/or sinuses), and the proportion of severe microtia was higher in Quito than in the rest of the sample. Neither seasonal, nor secular variations were observed in Quito or the rest of the sample; data suggesting the geographical cluster did not arise in recent years.

Case-control analysis of familial, prenatal and perinatal history data in 184 cases with isolated microtia (68 from Quito and 116 from the rest) and in 184 matched non-malformed control newborn babies, identified prenatal drug exposure, high birth order, and elevated paternal age as risk factors for the microtias born in Quito.

Prevalence rates of microtia in South America, Castilla EE, Orioli IM.

(Int J Epidemiol. 1986 Sep;15(3):364-8)

Facts on Ecuador

- The percentage of the population below the national poverty line is 65%.
- Children have no access to government sponsored health insurance. Health-care is available only to individuals that work and despite the fact that a mother or father may be insured, there are no family health plans.