

Down's Syndrome in pre-Hispanic pottery of the Colombia–Ecuador Pacific coast (2000 years ago)[☆]

Síndrome de Down en una cerámica prehispanica de la costa pacífica colombo-ecuatoriana (2,000 años antes del presente)

Dear Editor:

Down's syndrome is the most common genetic cause of mental retardation. It is characterised by intellectual disability and typical physical features caused by an extra copy of chromosome 21. It is the most common chromosome abnormality, occurring in 1 in every 700 live births. Every year 220 000 babies are born with this syndrome. Advanced maternal age is the most important risk factor.^{1–3}

This syndrome was clinically described by Langdon Down in 1866⁴; in 1959, Lejeune and Jacobs, working independently, first determined its cause.^{5,6} There are a number of paintings of figures with Down's syndrome characteristics, such as "Madonna and Child" by Andrea Mantegna (1430–1506).^{7–9} The Toltec culture of Mexico (500 CE) left a record of the presence of Down's syndrome in pre-Columbian populations in the Americas.¹⁰



Figure 1 Artistic representation of an individual with Down's syndrome characteristics. Tolita–Tumaco culture (300 BCE–600 CE). Gold Museum, Bogotá, Colombia.

The image shows a pottery figurine made by Tumaco–La Tolita people (300 BCE–600 CE). This culture lived along the Pacific coast of what is now Ecuador and Colombia and depicted the different diseases present in their population, as well as the ageing and dying processes, with incredible realism. Their artistic legacy also provides an important record of genetic diseases such as achondroplasia, Morquio and Hurler syndromes, and facial abnormalities such as facial paralysis.^{11,12}

The sculpted figure is a young male with typical Down's syndrome features including midface hypoplasia, upward slanting palpebral fissures, and tongue protrusion. This pottery figurine may be the earliest artistic representation of Down's syndrome (Fig. 1).

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[☆] Please cite this article as: Pachajoa H, Rodríguez CA. Síndrome de Down en una cerámica prehispanica de la costa pacífica colombo-ecuatoriana (2.000 años antes del presente). *Neurología.* 2013;28:62.