

## A neurological disease on the face of an ancient Roman sculpture

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A votive deposit, dedicated to a healthy divinity, was found near Lanuvio (south east of Rome), along the Appia street, in a locality called Pantanacci, during archaeological excavations, in 2012.

The stipe offerings dates back to the IV-III century B.C. (1,2).

The recovery of more than two thousand clay ex-voto, many of which were anatomical objects, makes this deposit one of the most important findings of recent years.

These terracottas are produced in series: heads, male and female genitals, mouths with tongues and eyes and feet; common typologies and already known by the Etruscans. Few specimens seem to be personalized.

One of these objects reproduces a head (cm.6x3), with the face in a grimace attitude: crushed eyelids of the left eye, deviation of the nose to the right, stretched upper lip on the bottom right and twisted mouth (Figure 1).

This head allows us to suspect the Bell's paralysis, the IV-V grade according to House-Brackmann (3). The right eye appears dilated and seems to indicate the swirling of the bulb that is the typical sign of Bell's paralysis (3).

Bell's palsy affects the facial nerve, the seventh pair of cranial nerves, the cause is unknown, probably a virus or other conditions, (stroke, tumors, Lyme disease, etc.) (4). Paralysis occurs to hemiface innervated by the nerve, with crooked mouth, abnormal eyelid closure and asymmetries.

Comparing ancient objects with facial paralysis, we believe that only two terracottas may represent Bell's paralysis. One of these is from the Hellenistic period and belonged to the collection of Meyer-Steineg. The other terracotta was purchased in Izmir, it is from the Roman period and it is exhibited at the National museum of Antiquities in Leyden. It is of uncertain origin and disappeared during World War II, of this clay remained only one image (5). Both objects reproduce Bell's palsy. The little statue of Leiden presents very well the mimic alterations of this pathology on the face (5).

Hellenistic heads of the Museum of Taranto (Italy) and of Benaki (Athens), the relief of the Archaeological Museum of Florence, and that of the Archaeological Museum of Magdalenenberg (in a Roman vase), all these are just grotesque faces of comedy (5).

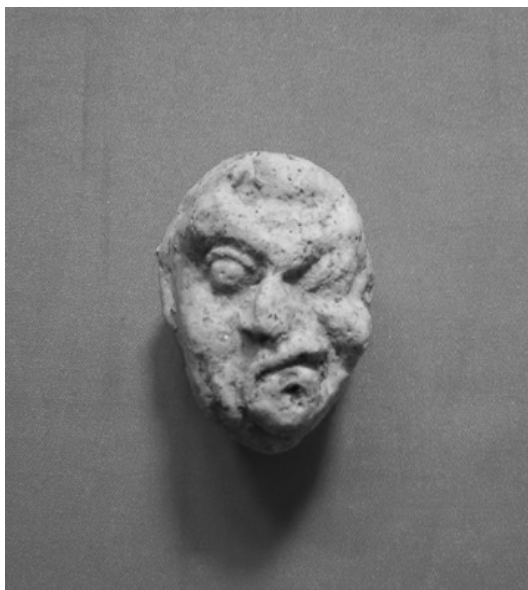


Figure 1 - Bell's palsy.

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The head of the Lanuvio Archaeological Museum, in the absence of the Meyer-Steineg head (which lacks the history of the discovery), as well as the head of Leiden, acquired in Izmir (which lacks the excavation provenance) is the world's only denoting Bell's paralysis of which is documented the archaeological excavation.

An Etruscan influence is attested in Central Italy, during the V-IV century B.C. Since we know the abilities of the coroplasts in anatomical reproductions (6), we may suspect that this is a further connection between the Etruscan and Roman medicine.

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The announcement of this discovery was presented at the GIPaleo Conference on May 12, 2017 at the University of Pisa and in abstract for the Pathologica magazine.

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