## TRICHURIS TRICHIURA EGGS IN HUMAN COPROLITES FROM THE ARCHAEOLOGICAL SITE OF "FURNA DO ESTRAGO", BREJO DA MADRE DE DEUS, PERNAMBUCO, BRAZIL

## LUIZ FERNANDO FERREIRA, ADAUTO ARAÚJO, ULISSES CONFALONIERI & JEANNETTE M. DIAS DE LIMA\*

Escola Nacional de Saúde Pública - FIOCRUZ, Caixa Postal 926, 20001 Rio de Janeiro, RJ, Brasil

\* Universidade Católica de Pernambuco, Recife, PE, Brasil

Parasitic infections in precolumbian time have been recorded from archaeological sites of many different cultures of the New World, from the Alaskan region to the Chilean Andean region, and could be also found in hunther-gatherer groups that lived in temperate and hot dry regions of North and South America.

Trichuris trichiura is one of the most frequent parasite found in archaeological material collected in the Americas (P. Horne, 1985, J. Archaeol. Sci., 12: 299-310; K. Reinhard et al., Homo, 37: 217-239). The geographic distribution of the human whipworm in the ancient World population was reviewed by U. Confalonieri (1988, in L. Ferreira et al. Paleoparasitologia no Brasil, PEC/ENSP, RJ) who proposed, based on paleoparasitologic data, that the parasite has a phylogenetic lineage, inherited by man from his ancestors, and was introduced into the New World prehistoric populations by transpacific contacts with Asian fishermen.

This paper reports the finding of *T. tri-chiura* eggs in human coprolites collected in an archaeological site called "Furna do Estrago", in Brejo da Madre de Deus, Pernambuco State, Northeast of Brazil. This archaeological site was occupied by human populations from 11,060 ± 90 years BP (Before Present) to 1,040 years BP (C<sub>14</sub>-Smithsonian Institution), as indicated by the stratigraphic levels of artefact remains, including hearths from where the datings were obtained.

The coprolites were collected from level 3 to 8, at 120 cm of depth, associated with several human burials dated from 2,000 years BP (J. Lima, 1985, Clio, 7:97-111). The burial patterns of this group were uniform. The adult bodies were tied in a fetal position and wrapped in palm leaf mats. They had necklaces made of rock pebbles, shells, seeds and animal teeth and bones. The diet was based on hunting and the gathering of fruit, seeds and roots (J. Lima, 1984, Symposium, 26:9-60). A paleopathologic analysis of a male skeleton (± 45 years old) revealed a healed Colles' fracture (M. Alvim & S. Sousa, 1984, Symposium, 26:61-86).

Four samples with several fragments of cylindrical coprolites measuring 1 to 8 cm collected from the abdominal cavity of skeletons, were sent to our Laboratory of Paleoparasitology where they were rehydrated in trissodium phosphate solution and examined for parasites after spontaneous sedimentation. Microscopical analysis showed eggs of T. trichiura measuring 56,61 x 29,97  $\mu$ m. The coprolites were identified as human faeces by the shape and size, the black opaque colour of the rehydration solution after 72 hours, the archaeological context, and the presence of the human specific parasite, not found in other animals in South America, at this time. The food remains of the coprolites are still under study.

This result amplifies the known geographical distribution of T. trichiura in precolumbian times.