



Paleoparasitological Evidence of Human Giant Kidney Worm Infection in Ancient Iran Dates Back To Parthian Empire (247 BC – 224 AD)

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Paleoparasitology is the study of biological remains excavated from the archeological sites aiming to detect the parasites of humans and animals from the ancient times. In this study, we tried to retrieve the parasitic agents dated back to Parthian Empire (247 BC – 224 AD] in the ancient cemeteries located at the Caspian Sea Littoral of Iran, presently known as Kiasar Town in Mazandaran Province, Iran (N: 36 14' 317" E: 053 35' 149". Soil samples were precisely collected from the pelvic and sacral bones of 25 skeletons, previously excavated from the crypt graves. Paleoparasitological investigation was carried out for the entire samples individually, in the laboratory of Helminthology, Tehran University of Medical Sciences, Tehran, Iran during 2015 to 2017, using direct rehydrating technique (TSP). Consequent to an appropriate time of rehydration, nearly 2000 of microscopic slides were carefully examined. Apart from many other similar parasite particles that have not been valued to be reported confidently, the eggs of *Diocotophyma renale* helminth were surprisingly detected in the burial with code number: TH35 G2. The present finding illustrates the existence of this parasite on that time in Iran. Review of the literature show the scarce number of this paleoparasitological finding worldwide. It can be assumed as the first record of this parasite in archeological context in the Middle East including Iran. Regarding the public health importance of the giant kidney worm infection, finding of *D. renale* eggs, in ancient cemeteries of Iran, describe the possible occurrence of human infection with this zoonotic helminth in ancient Iran.

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