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The determination of age, sex and stature of prehistoric human skeletal remains excavated from Sigiriya Potana in Sri Lanka

K.M.Chandimal^{1*}, S.G.Yasawardene² and G. Adikari³

¹ Department of Anatomy, Wickckramarachchi Ayurveda Institute, University of Kelaniya, Kelaniya

² Department of Anatomy, Faculty of Medical Sciences, University of Sri Jayawardenapura, Nugegoda

³ Postgraduate Institute of Archaeology, University of Kelaniya, Kelaniya

The study of skeletal remains, bone and teeth are of utmost importance in archaeology and forensic inquiry. Potana Sigiriya, prehistoric Mesolithic heritage site in Sri Lanka has yielded three human skeletons dated as 4500-5000 BC according to radiocarbon (C¹⁴) dating. Detailed analysis of skeletal remains at Potana Sigiriya has not been done. Thus the objective of this study was to determine age, sex and stature of one of the skeletons labeled as I. The morphological analysis was done to determine age and sex of the individual by using available fragments of cranial, pelvic and long bones following the methods described by Brothwell. The available cranial, pelvic and long bones showed the prominent morphological features such as highly robust, heavy, prominent muscle attachment sites which are comparable with the male sex. The reconstructed cranium is of dolicocephalic in type with high vault. The wear pattern and tooth eruption of available maxillary dental remains were used in estimating the age of the extinct individual. The left and right upper third molars were fully erupted and had no signs of wear on their occlusal surfaces. The left and right upper 1st molars were complete and slight attrition was noted over the lingual cusps. There was no evidence of crowding, torodontism, shovel shaped incisors, artificial deformations, pigmentations/staining or dental caries. The estimated age is around 25–30 years. The stature of the extinct individual was reconstructed by applying the regression formulae of Trotter, Gleser, and Krogman on available fragmented and restored long bones. The reconstructed height of extinct human is 173.61cm. This height is higher than the mean height of present modern population, male being 164.19 cm reported in Somasundaram, (2004). This confirms Kennedy's (1965) reporting that Balangoda man appears to have been taller than the mean height of the present modern Sri Lankan population but this is in contrast to the reconstructed mean height, 140.05cm of Bellanbandipallassa skeletal remains as reported by Kanthilatha, (2008).

Keywords: osteology, pre-historic skeletal remains, Sigiriya Potana

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