

CRANIOFACIAL MORPHOLOGY OF THE *PURANA* POPULATION IN THE SUBURBS OF SIGIRIYA

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Racial and ethnic affiliation, climate, socio-economic aspects, nutrition and genetic influences are the known determinants of craniofacial morphology in *Homo sapiens*. The ancestry of the 'Purana' population living to the Sigiriya suburbs can be traced back to the times of the Sinhalese Kings of the 5th century A.D. (1,450 YBP). They can be identified by their 'Purana' surnames such as Aluthgedara, Gamagedara, Undiyagedara, Beddegedara, Millagahagedara, Kongahagedara *etc.* They maintain their caste system by inter marriages within the community and are considered as isolated breeding units with extended family endogamy. This study was carried out to determine the phenotype of the head, face and nose of the 'Purana' population at Sigiriya suburbs.

One hundred and seven (107) adult male and 206 adult female 'Purana' inhabitants residing in Talkote, Diyakepilla, Nagalaweve and Pidurangala 'Purana' villages, belonging to 'Purana' pedigree were recruited. The selection was based on verbal pedigree analysis and by tracing the pedigree back to at least three generations. Cephalic length and breadth, facial length and breadth and nasal height and breadth of the selected individuals were measured and the cephalic index (CI), facial index (FI) and nasal index (NI) were calculated. The commonest phenotype of shape of head, face and nose of the 'Purana' population was determined.

The mesocephalic cephalic phenotype (CI = 76.0-80.9) was the commonest in both males (41%) and females (34%) of the 'Purana' population in Sigiriya suburbs. The leptoprosopic face (FI = 90-94.5) was the commonest facial phenotype in both male (30%) and female (34%) of the 'Purana' population. The mesorrhine (medium nose) (NI=70-85) was the commonest nasal phenotype in both male (57%) and female (56%) 'Purana' population. Considering the cephalic phenotype, the dominant mesocephalic phenotype of the 'Purana' population was different to that of the dominant dolicocephalic phenotype of Sri Lankans (35% in males, 23.07% in females). The leptoprosopic facial morphology of male and female 'Purana' population differs from the reported facial morphology of Indian male (mesoprosopic) and female (mesoprosopic). The mesorrhine nose identified as the commonest type in the 'Purana' population is comparable with the commonest shape seen in Caucasoid of early Indo – Aryan and contrast with the leptorrhine nose seen in Caucasoid and platyrrhine nose seen in Negroid & Australoid.

It can be concluded that the 'Purana' population at Sigiriya suburbs is different in terms of craniofacial morphology.