ABSTRACT

MORPHOLOGY OF AURICLE: COMPARISON BETWEEN JAVANESE AND CHINESE MALES IN THE SCHOOL OF MEDICINE, HANG-TUAH UNIVERSITY SURABAYA

The morphology of the auricle is complex and highly variable. It has been suggested that no two ears are exactly alike. This theory has led to the use of auricle as a tool in forensic identification. The majority of research in this area was performed in Europe around 100 years ago. More recent information on the range of variation seen in the auricle structure in other parts of the world is lacking. In this study both ears of 123 subjects, 63 Javanese males and 60 Chinese males who were studying in the School of Medicine, Hang-Tauh University Surabaya, were photographed and their variations were documented. Previous descriptions of the different parts of the ear, known as ear landmarks, were used to categorize ear types. Eleven measurements were performed directly on the right auricle and left auricle: ear inclination, ear height, length insertion, ear width, intertragic distance, width of anthelix, width of helix, height of earlobe, tragus height, antitragus height, earlobe length, and eleven characters: crus of helix, helix rolling, double tragus, superior crus of anthelix, tragus, antitragus type, antitragus size, earlobe size, Darwin’s tubercle, external auditory meatus, tubercle of crus. Comparison were made between the left ears of Javanese males and the left ears of Chinese males, and between the right ears of Javanese males and the right ears of Chinese males. RESULTS: The ears of Javanese males difference with the ears of Chinese males in the measurement and observation. Based on discriminant analysis, there is a significant difference in the right ear (length of insertion, earlobe length, ear width, antitragus height, tragus height). In the left ear (earlobe length, ear width, tragus height, superior crus of anthelix, tragus size, antitragus height, inclination) CONCLUSION: Based on measurement and observation, the ears of Javanese males difference with the ears of Chinese males.

Keywords: auricle, Javanese, Chinese, ear landmarks, ear prints, ear identification