ABSTRACT

THE MORPHOLOGY OF FORAMEN MAGNUM IN CT SCAN FOR SEX DETERMINATION IN JAVANESE

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Introduction: Forensic identification is used to identify the victim or lost identity. Radiographic images is one of important forensic identification tools, particularly for sex determination. Skull and pelvic ring morphology are most reliable organ for that.

Objective: To show the morphology of Javanese foramen magnum in CT Scan

Metode: 100 samples of non contrast brain CT Scan, separated with 50 samples male and female patients. the age range is 18- 55 y.o and no history of head trauma. The study using the probability sampling. Using MIP reconstruction, Foramen Magnum is measured in TD (Transverse Diameter) and APD (Anteroposterior Diameter). The TD and APD values can be measure FMI (Foramen Magnum Index).

Results: The mean TD (Transverse Diameter), APD (Anteroposterior Diameter) and FMI (Foramen Magnum Index) are 27,387 mm ± 0,3995, 31,9734 mm ± 0,3694, and 82,8949 mm ± 1,5631 respectively. The male samples, the mean of TD (Transverse Diameter), APD (Anteroposterior Diameter) and FMI (Foramen Magnum Index) are 27,7812 mm ± 0,458, 34,2348 mm ± 0,4764, and 81,202 mm ± 1,6022, respectively. In the other hand, the female samples, the mean of TD (Transverse Diameter), APD (Anteroposterior Diameter) and FMI (Foramen Magnum Index) are 26,9928 mm ± 0,341, 31,9734 mm ± 0,3694, and 84,5878 mm ± 1,524.

Keywords: CT Scan, Foramen Magnum, Javanese, Gender

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