

Clavicular facet of the coracoclavicular joint: Analysis in modern skeletons of the mapuche indigenous individuals

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Introduction: The coracoclavicular joint (CCJ) has been used as an anthropological marker for human migration, with a strong presence in Asian population. In South America, studies are scarce and incomplete. The aim was to determine the frequency of articular facet of CCJ in an osteological sample pertaining to Mapuche indigenous population in Chile. Methods: We used 96 clavicles (48 left and 48 right), and the presence and characteristics of the articular facet on the conoid tubercle were determined by direct observation. Maximum transverse diameter (MTD) and maximum antero-posterior diameter (MAPD) were measured using a digital caliper. The frequency obtained was compared with other osteological studies on worldwide population. Results: Articular facet was found in 22.9% of the cases. Twelve facets (12.5%) were present on the right side and 10 (10.4%) on the left, with 10 paired bilaterally and two paired unilaterally on the right side. Articular facets were very clear and prominent in 4 cases (4.2%), regularly prominent in 6 (6.3%), and poorly prominent in 14 (14.6%). The facets were usually oval, with an MTD and MAPD of 19.2 and 18.8mm, respectively, without differences by side. Discussion: Mapuche ethnic group showed the highest frequency of osteological material reported to date between native South American and global population. Their presence may not be related to a geographical migration, but to other causes such as genetic, environmental, or evolutionary adaptation factors. The study of CCJ as anthropological trait must be addressed through direct observation in osteological material, because radiological studies may underestimate its frequency. © 2014, Anatomical Society of India.

Articular facet

Coracoclavicular joint

Human clavicle

Mapuche

Population variations