

Gender determination using Rhomboid Fossa from the Clavicle

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Clavicle is a bone located in the ventral face of the thorax, in the superior portion, articulating with the first rib through the costoclavicular (rhomboid) ligament, stabilizing the pectoral girdle, placed bilaterally. It is commonly used to differentiate sexual dimorphism in human skeletons. It also has morphological variations in different populations around the globe. The aim of this study was to verify statistically the use of rhomboid fossa to determinate gender in human skeletons. The research was performed in a Brazilian population from Cuiabá-MT. 209 pairs of clavicles had been studied, divided as 107 masculine and 102 feminine with ages between 20 and 70 years. A significant statistic relevance was found = $5,98 \times 10^{-23}$ (exact test of Fisher) between the genders. 97% of the clavicles from the feminine gender had no rhomboid fossa and 3% had it bilaterally. In the masculine gender, 36% had no rhomboid fossa, 29% had it bilaterally, 16% had it only in the left clavicle and 19% only in the right clavicle. The results had been submitted to statistic analysis and concluded that this is a qualitative method that can be used as parameter for sexual dimorphism in unknown skeletons and that once a certain clavicle lacks the rhomboid fossa, can be affirmed that is from the feminine gender.