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Impact of aging on fingerprint ridge density: anthropometry and forensic implications in sex inference

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ABSTRACT

The variation in the epidermal ridge's width between the sexes, during various growth stages, and among different populations has been previously assessed. However, the changes that occur with aging are barely known.

The goal of this study was to analyse the degree of variation in epidermal ridge width due to aging. So that, fingerprint ridge density was estimated to establish their relationship with body and hand size changes that typically occur in adulthood.

In this study, a sample of 213 adults of both sexes from a Spanish native population of different age ranges—18–30 years old ("junior" group) and 50–66 years old ("senior" group)—was used. Ridge density was assessed in three counting areas of the distal

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