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Age estimation in a sub-adult Western Australian population based on the analysis of the pelvic girdle and proximal femur

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Highlights

- Contemporary radiographic proximal femur and pelvic girdle age estimation study
- Population standards for Western Australia based on MDCT imaging
- Predictive models with associated accuracy of ±3.29-4.58 years

Abstract

The accurate and precise estimation of skeletal age by a forensic anthropologist is both a professional and judicial requirement. When unknown skeletal remains are referred to the anthropologist, the estimation of the requisite biological attributes (e.g., age and sex) should accordingly be based on the application of population-specific standards (statistical data). Deviations from the latter practice may result in reduced accuracy and compromised identification. Towards informing appropriate forensic practice, the aim of the present study is to develop statistically quantified age estimation models for a contemporary sub-adult Western Australian population based on the timing of fusion in the os coxa and proximal femur.