FORENSIC RESEARCH PROJECT

RESEARCH PROJECT

Title: Trauma analysis in Forensic Anthropology

Keywords: perimortem, taphonomy, blunt trauma, bone trauma

Forensic Expertise Area: Forensic Anthropology

Department: Pathology Service

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SHORT DESCRIPTION

The interpretation of bone trauma is an important task for forensic anthropologists. The mechanical properties of bone allow anthropologists to attempt to reconstruct the biomechanics of trauma, and to derive knowledge about possible circumstances related to the manner of injury. This allows professional forensic anthropologists to complement the work of forensic pathologists in the assessment of bone injuries in fresh cadavers.

Research questions:
- Analyse bone fracture patterns related with several types of injuries (mainly, blunt and firearm trauma).
- Obtain macroscopical bone patterns to optimize the distinction between peri- and post-mortem fractures in several bone types.
- Obtain histological bone patterns to optimize the distinction between peri- and post-mortem fractures in several bone types.

Methodology:
- Experimental trauma tests
- Analysis of trauma autopsy cases
- Macroscopic and histological examination of fractures
- Biomechanical analysis of the bone fracture patterns

REQUIRED/RECOMMENDED EXPERTISE

- Human anatomy / biology knowledge

REFERENCES