



Physical Anthropology Section – 2009

H87 Unusual Skeletal Variations Observed in an Adult Aboriginal Male: Case Study from Brisbane, Australia

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After attending this presentation, attendees will understand the role of police crime scene examiners in Queensland with relation to skeletal recovery and the unique role they serve in Coronial investigations. Attendees will also understand that standard age techniques were unable in this instance to assist with determining a reasonable age range for this individual.

This presentation will impact the forensic community by illustrating the unique role of police officers and routine variations encountered during skeletal casework within Queensland, Australia.

On July 1, 2007, forensic scientists from the Queensland Police Service Physical Evidence Unit went to a bushland location within an industrial area approximately 18 kilometers southwest of Brisbane, Australia in response to the discovery of human remains. The remains were located on a vacant block of land surrounded by a heavy industrial area. This area was routinely used by truck drivers to park heavy vehicles. The human remains were completely skeletonized, devoid of tissue, and had associated items of clothing. The remains were located within a small area and exhibited limited scattering effects by local predators. Flyscreen spline containing cervical vertebrae looped around a tree was also located. A humpy (small, temporary shelter) was located near the site. Almost all of the skeletal elements were recovered. This included most of the long bones, disarticulated pelvis, cranium and mandible, ribs, vertebral bodies, sternum, thyroid cartilage, and hyoid bone. All of the teeth were also present.

On the 3rd of July 2007, a forensic osteologist from the Queensland Police Service went to the Queensland Health Forensic & Scientific Services morgue to assist with the postmortem examination of the skeletal remains. The remains were consistent with an Aboriginal male with an approximate living stature of 173 +/- 3.91cm. The determination of age was difficult using traditional aging techniques. All long bones had fused. The sternoclavicular joint had fused. The thyroid cartilage was almost completely ossified and consistent with Stage 8 of Vleek's method corresponding to an range of 51-58 years. However, the pubic symphysis was consistent with the Suchey-Brooks method Phase II suggesting an age range of 19-34 (95%). Extensive pathology and a wire was observed within the sternum and manubrium indicating previous thoracic surgery. The age range given to investigators at the time of the autopsy was 25-58 years at the time of death.

The details of the biological profile obtained during the autopsy were supplied to the investigators to compare against the Missing Person Database. No links were obtained, and therefore no possible identity was forthcoming.

During subsequent examinations of the recovered clothing, deteriorated paperwork was located within an item of clothing. This paperwork provided crucial information which aided in the identification process. These documents included a bail conditions release form with a name believed to be that of the deceased. DNA taken at the time of autopsy confirmed the identity of the remains. The deceased was 27 years of age. It was discovered that the deceased had been involved in a stabbing incident two years earlier and had undergone thoracic surgery. Also of interest was that no missing person reports had been lodged for this person. A search of police computer systems revealed that the deceased had been last involved with police approximately 8 months earlier.

Forensic Osteology, Age Estimates, Scene Recovery