



## General Study on Forensic Anthropology

Yuri Ugen\*

Department of Legal Medicine and Forensic Sciences, University of Porto, Porto, Portugal

### DESCRIPTION

Forensic anthropology is a specialty of physical anthropology (study of human bodies), including the application of skeletal analysis and techniques in archaeology to resolve criminal cases. When a human body or suspicion of burial was found, forensic anthropologists were called in to gather information from the bones and their findings, how they died, and how long ago they died. Forensic anthropologists specialize in the analysis of hard tissues such as bone. Along with the Training in archaeology, they are also skilled in excavating buried relics and carefully recording evidence. Forensic anthropology involves applying the same method to modern cases of unidentified bodies. Through established methods, forensic anthropologists can assist law enforcement agencies in profiling unidentified bodies. The profile includes an assessment of gender, age, race, height, time elapsed since death, and observed trauma to the bone. Often, after the individual's identity is confirmed, forensic anthropologists are asked to testify in court about the identity of the body and the trauma or wound on the body.

### FORENSIC INVESTIGATION

Forensic anthropologists can treat bodies in a variety of situations, including mummies, piles of bones, disassembled bodies, burnt bodies, victims of plane crashes and natural disasters. Investigations often begin with ground investigation teams to find missing bodies and skeletons using corpse dogs and low-flying aircraft. Forensic anthropologists are often involved in the early stages of examining the human skeleton, as careful examination of each death scene is essential. After mapping, photographing, and labeling relevant items at the crime scene, examines the osteological evidence at the forensic Institute. Bone fragments are sorted by size and shape and combined when possible. As experts in osteology, forensic anthropologists focus on different human skeletal features, such as skull features, tooth features, and sub cranial bone size and shape that vary from individual to individual and from group to group. Bone abnormalities, metal plates or pins, or the presence

of certain tooth features can contribute to reliable identification when compared to medical and dental records.

There are 206 bones in the adult skeleton, but this number varies from person to person. A person may have extra vertebrae or ribs. In general, the skeleton of an adult male is larger and more robust than the skeleton of an adult female. A pelvic examination can be used to determine a person's gender. A small pelvic brim and narrow pelvic opening indicate an adult male, and a large pelvic brim and wide pelvic opening indicate an adult female. A person's general age can be determined from the size of the skull, the condition of the sutures, the examination of the teeth, and the length of the specific bone (e.g., the femur and the humerus) and the degree of ossification (bone hardening) that occurs between the axis of the long bone and its ends cap.

### STEPS INVOLVED

#### Reading a skeleton

Bone and tooth growth and developmental stages indicate whether the ashes are of children or adults. The shape of the pelvis provides the best evidence of a person's gender. Abnormal changes in bone shape, size, and density may indicate illness or trauma. Bones marked with fatal injuries such as unhealed fractures, ammunition holes, and cuts can reveal the cause of death. Trained anthropologists can also identify skeletal clues to their ancestors. Certain activities, diets and lifestyles are also reflected in the bones and teeth.

#### Analyzing human remains

They also conduct research on historic and prehistoric human remains to learn more about people from the past.

#### Techniques

Bones are usually photographed and x-rayed. Some bodies can be scanned by CT or examined under a high magnification microscope. These techniques provide detailed information

**Correspondence to:** Yuri Ugen, Department of Legal Medicine and Forensic Sciences, University of Porto, Porto, Portugal, E-mail: yuri\_ugen@gmail.com

**Received:** 02-May-2022, Manuscript No. JFB-22-16068; **Editor assigned:** 05-May-2022, Pre QC No. JFB-22-16068 (PQ); **Reviewed:** 19-May-2022, QC No. JFB-22-16068; **Revised:** 26-May-2022, Manuscript No. JFB-22-16068 (R); **Published:** 02-Jun-2022, DOI: 10.35248/2090-2697.22.13.395

**Citation:** Ugen Y (2022) General Study on Forensic Anthropology. J Forensic Biomech.13:395.

**Copyright:** © 2022 Ugen Y. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

about the corpse without altering it, while providing a visual record. DNA analysis can help to determine identity. This type of test is most commonly used in modern forensic casework can use bone and tooth mitochondrial DNA to confirm the relationship between ancient ruins and deceased or living offspring. Other chemical analyses such as the use of isotopes can provide information about the age and diet of a person's bones.

### Collections of bones

Individual bodies with known biological information are especially valuable references. Forensic anthropologists have used these skeletons to develop criteria for determining the sex,

age, and parent-child relationships of unknown bodies. Bones and teeth are also used as a reference when certain features are difficult to interpret.

### CONCLUSION

Forensic anthropologists use a variety of methods and techniques to collect and analyze human skeletal data. Important data collection methods include anthropometry; bone measurement, histology, and chemical methods that analyze the data collected using decision tables, area charts, indexes, discriminants, and regression equations included. Although this field has made great progress in the development of technology in many modern fields.