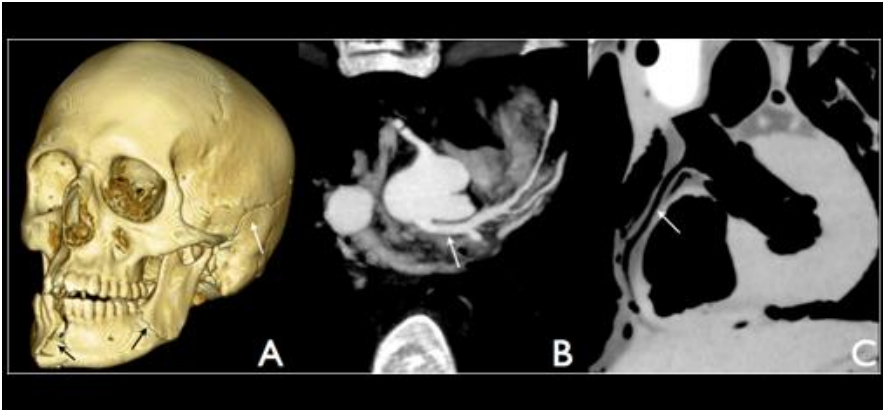




The Royal College of Pathologists

Pathology: the science behind the cure

Object 8: 3-D CT scan



What is it?

CT (computed tomography) is an imaging technique that uses x-rays to produce images of 'slices' of the human body so that abnormalities can be seen. Three dimension (3-D) scans are produced by computers, with numerous slices being put together to form a life-like three-dimensional image that can be rotated and viewed from different angles.

History

The first commercial CT scanner was invented in England at the EMI laboratories, funded by profits from The Beatles records. CT scanners have since been refined to make machines smaller and faster while exposing patients to less radiation.

Pathology

The pathology specialty that makes most use of 3-D CT scans is forensic pathology, the specialty involved in the investigation of unnatural deaths. 3-D CT scans allow pathologists to examine bodies in detail before they even pick up a scalpel. 3-D images are particularly useful when examining wounds such as those made by a knife or bullet. The path of the weapon can be examined and the presence of a bullet or other foreign body identified.

Find out more

This video shows how a CT scan can be used to put together a 3-dimensional image of the skull: <http://www.youtube.com/watch?v=AxZTca0t2ws>

Scientists at the Smithsonian Museum in Washington DC have scanned a mummy using [3-D technology](#).