



RCS

ADVANCING SURGICAL STANDARDS

The Royal College *of* Surgeons *of* England

A History of Human Dissection

Early Anatomy

Until the 1500s most knowledge of the human body came from the teachings of Galen (c129-199AD). Galen had, however, never dissected a human body because human dissection was banned in ancient Rome, so he based his anatomy on dissections of monkeys and pigs.

In 1543 Andreas Vesalius published his groundbreaking and controversial anatomy book *De Humani Corpora Fabrica*. This was based on human dissection, allowing him to correct many of Galen's claims. For example, Vesalius disproved the belief that men had one rib fewer than women, based on the biblical Creation.

In the 1500s the Company of Barber-Surgeons (later the Royal College of Surgeons) was granted a license to receive the bodies of four executed criminals each year for the purposes of dissection. This was the only legal way of obtaining human bodies for dissection. A demonstrator would carry out the dissection in an anatomy theatre while a master read from a medical textbook and pointed out the features of the body and students simply watched from a distance.

Anatomy in the eighteenth century

In the eighteenth century there was a surge of interest in medical science. Several private anatomical schools opened. William and John Hunter's school was one of the first. William Hunter introduced the new 'Parisian' method of anatomy teaching, where students dissected bodies themselves. This dramatically increased the demand for human bodies. The only legal source of bodies was still executed criminals, but this did not satisfy the demand. Anatomists were forced to acquire bodies illegally from grave robbers known as 'resurrection men'.

Many people believed that the body needed to be intact in order to ascend to heaven, so grave-robbing was seen as sacrilegious. Popular feeling was outraged, in 1828, when the now infamous Burke and Hare confessed to murdering sixteen people in Edinburgh in order to supply the bodies to anatomists. In 1831, John Bishop and Thomas Williams committed a very similar crime in London. They were hanged and it was then their bodies that were dissected.

The 1832 Anatomy Act

The Anatomy Act was passed in 1832, after a long political battle. It allowed surgeons and students to dissect bodies that were unclaimed after death. In practice, 'unclaimed bodies' meant the bodies of those whose families could not afford to pay for burial, especially those who

died in prisons, workhouses or asylums. The Act put a stop to body-snatching but was seen as an attack on the poor, who abhorred the idea of dissection. It provoked rioting at some medical schools, prompting anatomists to become very secretive about their activities.

The philosopher Jeremy Bentham tried to encourage people to change their attitudes towards dissection by donating his body to medical science. His preserved remains, dressed in his own clothes, are still on display at University College London. Bentham's actions had little impact on the general public and many people saved money with funeral clubs to ensure they would not be dissected.

The Anatomy Act was amended several times and the right to 'unclaimed bodies' was eventually abolished.

The Human Tissue Act 2004

In 2004 the Anatomy Act was replaced by the Human Tissue Act. This was partly as a result of public scandals at Alder Hey Children's Hospital and Bristol Royal Infirmary where children's organs had been retained without consent. The Act created the Human Tissue Authority which regulates the use of human tissue for anatomy, public display, organ transplantation, post-mortems and medical research.

Anyone who wants to donate their body to medicine must now give written consent and specify what purposes their body can be used for.

Human bodies at the College

Until the Second World War the College did not train students in anatomy. Human dissection was carried out by specialists who created museum specimens specifically for teaching.

After the Second World War the Institute of Basic Medical Sciences opened, offering post-graduate training to students at the College. Students at the Institute dissected bodies as part of their training.

Teaching at the College has undergone many changes since the 1950s. The College's Department of Education now offers a range of specialist surgical training courses. The College receives around one hundred human bodies a year donated for this purpose.

The Human Tissue Act requires the College to have licences for the display of human tissue and for anatomy and surgical teaching. The College is regularly inspected to ensure continuing compliance.

Following dissection bodies are taken away and individually cremated. Each year representatives of the College attend, with the families, a Service of Thanksgiving in recognition of these invaluable donors.

The Human Tissue Authority Website: <http://www.hta.gov.uk/>