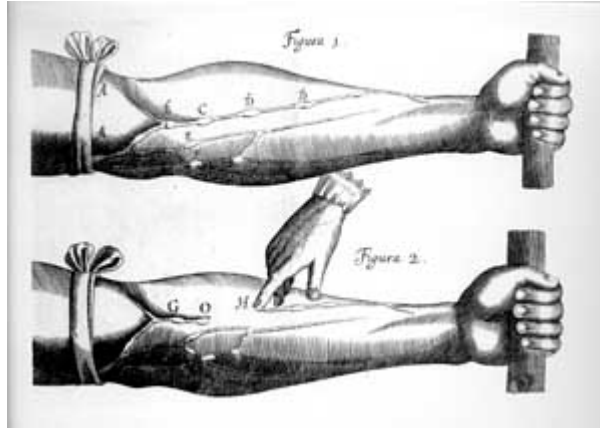


William Harvey (1578-1657)

Until the early 17th century [Claudius Galen's](#) books were still being used in some medical schools. Although [Andreas Vesalius](#) had proved some of his ideas to be incorrect, Galen's explanation of the heart was still preferred by most doctors. It was William Harvey who proved that Galen was wrong and so made one of the most famous of medical discoveries.

Who was William Harvey?

Harvey was a doctor at St. Bartholomew's hospital in London and a Fellow of the Royal College of Physicians. He was also the physician to James I and Charles I. Harvey studied in Italy at the University of Padua where he became interested in anatomy and in particular, the work of Vesalius.



**Sketch of valves on the arms
from Harvey's book**

What were his important discoveries?

In 1615 Harvey began to work on the idea that blood circulated around the body. By experimenting on live animals and dissecting the bodies of executed criminals, Harvey was able to prove that the heart was a pump which forced blood around the body through arteries. Veins then returned the blood to the heart where it was recycled. Harvey's work was helped by the discovery that veins contained valves. Harvey realized that these valves stopped the blood from traveling back the wrong way to the heart. Galen's theory (that the body made new blood as its supplies were used up) was proved wrong. In 1628, Harvey published details of his work in his book entitled 'An Anatomical Disquisition on the Movement of the Heart and Blood.'

Why did Harvey face opposition?

After his work was published, Harvey actually lost patients, as his ideas were considered eccentric. It was not until after his death that others became convinced that he was right. Marcello Malpighi (1628-1694), an Italian physician, used better quality microscopes to prove that Harvey's ideas were correct.

How important was Harvey?

Harvey's work made little difference to general medical practice at the time. Blood letting continued to be a popular practice and it was not until the 20th century that doctors realized the importance of checking a patient's blood flow by taking a pulse. Harvey's work did encourage others to investigate blood circulation, e.g. the blood's role in carrying air from the lungs. His discovery of blood circulation was central to a proper understanding of the workings of the body.

Questions

1. Who was William Harvey and where did he study?
2. What did Harvey discover?
3. Why weren't Harvey's ideas accepted by many people at the time?
4. What was the long term importance of Harvey's work?

