What contribution did edward jenner make to medicine?

The person I have chosen to write about is Edward Jenner. He was born in 1749 and is famous as the firstdoctorto introduce and study the smallpox vaccine. I am interested by his work as it was the basis of thescienceof immunology, resulting in many medical advances, the benefits of which can be seen in medicine today.

Smallpox is a virus spread through coughing, sneezing and physical contact with an infected person. Epidemics broke out in Britain every few years, resulting in many deaths. In the eighteenth century a method of inoculation was introduced to Britain. This reduced the chance of dying from smallpox, yet it carried with it many risks. Whilst offering inoculations against smallpox, Edward Jenner, a doctor from Gloucestershire, discovered that those who had previously suffered from cowpox were less likely to catch smallpox than those who hadn't. He subsequently came up with the idea of using cowpox, a mild disease, as a method of prevention.

In an attempt to prove this theory, Jenner conducted an experiment in which he took matter from a cowpox sore and inserted it into a boy through two cuts. After slight uneasiness in the following days, the boy was perfectly well. He was then inoculated with smallpox matter, which was repeated again several months later, but no disease followed on either occasion. After completing the experiment 23 times, he came to the conclusion that 'cowpox protects the human constitution from the infection of smallpox'.

Although Jenner was unable to prove his theory, his vaccination saved many lives. He recorded and published his findings himself as there was much opposition to vaccinations at first. This was because some people found it

hard to accept anything new, especially when there was no explanation as to why it worked. Also, if his vaccinations proved to be a success, doctors would lose the income they received from providing inoculations. As well as this, some people saw the vaccination as dangerous. This was for reasons including doctors accidentally infecting patients with smallpox instead of cowpox or using infected needles, both of which resulted in many deaths. However, Jenner's work paid off, and in 1840 the British government provided vaccination free of charge.

The main reason that I am interested in Jenner is that he was able to come up with a successful method of prevention of smallpox without advancedtechnology. His observations and experiments provided accurate results leading to life saving treatment, which I feel was one of the biggest medical achievements up until that time considering that smallpox had previously been one of the biggest killer diseases. He was not put off by the 'less than enthusiastic' view of the public, choosing to record his findings personally in hope that they would one day be accepted and prove to be useful (which is what finally happened).

Also, his work greatly contributed to later medical advances. It was the basis of immunology, which was to be pursued with success by Pasteur and others half a century later, helped by technological advancements. His observations had a large influence on the declaration of smallpox as an eradicated disease in 1980 by the WorldHealthOrganisation.

In conclusion, Edward Jenner was a man who was able to make a large contribution to the advancement of medicine and prevention of death from

smallpox. This, in my opinion, makes him a prominent and essential figure in history.