

Smallpox!

Edward Jenner was a famous doctor that lived in Britain in the 1700's. He is now famous for vaccinating people against the disease smallpox.



Smallpox was a highly contagious viral disease that was around at the time of Edward Jenner. It causes fevers, muscle pain, stomach aches and vomiting. It also causes big pimples or pustules full of pus to appear on the skin. If someone survived this horrible disease, they were likely to be blind or have lots of scars from all the big pustules.



In 1796, Jenner noticed that there was another disease that was spread amongst milkmaids. This disease was passed from cows to the milkmaids and was called cowpox. Cowpox caused spots on the milkmaids but it wasn't deadly or harmful. Jenner noticed that milkmaids that had caught cowpox did not catch smallpox.



Jenner decided to test this theory. He found a milkmaid called Sarah Nelmes who had been infected with cowpox. He then scraped some of the pus from one of the spots on Sarah's cowpox infected hand. He then made a cut in the arm of an 8 year old boy, James Phipps, and wiped the cowpox pus into the cut. This is called inoculation.



James developed a fever but he wasn't very ill.

Once James had recovered, Jenner then went to someone infected with smallpox and removed some smallpox pus from one of their pustules. He then wiped this pus into a new cut on James' arm.

James developed no symptoms of smallpox. He had become immune!

This process became known as vaccination (because the Latin for cow is vacca and it was cowpox that was used to immunise against smallpox).

Questions

1 What are the symptoms of smallpox?

2 What disease was often caught by milkmaids that wasn't as harmful as smallpox?

3 What does inoculation mean?

4 What did Jenner do to show the effect of cowpox in protecting against smallpox?

5 What do we call this process?

6 What do you think about Jenner's experiment? Was he right? Would he have been allowed to do it today?