(7Aa/6) Organ transplants

Our organs are very important. If an organ goes wrong it usually leads to an illness and sometimes death. However, people's lives can be saved by giving them an **organ transplant**. This involves taking an organ quickly from a dead person and putting it into a person who needs it.

Many people carry a 'Donor Card'. This card gives doctors permission to remove organs from a person when they die. The organs can then be given to people who need them. Many lives have been saved in this way but the number of organs needed is much greater than the number available.

Kidney transplants are the most successful. Their job is to clean the blood and remove poisonous substances. Luckily, we all have two kidneys and people can survive with only one. However, if both go wrong then a transplant is needed. People who are waiting for kidney transplants are kept alive by regularly having their blood cleaned by a **dialysis machine**.

Other organs that can be transplanted are the heart, liver and lungs. The world's first heart transplant was carried out in South Africa in 1967 by Dr Christiaan Barnard. Unfortunately, the man who received the new heart died 18 days later. This happened because the man's body attacked the new heart and stopped it working. The new heart was **rejected**.

Rejection is a big problem in organ transplants. White cells in the blood patrol our bodies searching for and attacking things that are not made by our own bodies. This is normally useful, since our bodies get rid of many diseases in this way. However, the white cells will also 'see' that a new organ has been made somewhere else and attack it. Today, many new drugs have been developed to stop the white cells doing this. This means that people who have had transplants can look forward to many years of life.



- 1 Describe what is meant by the words 'organ transplant'.
- 2 Why do people carry 'Donor Cards'?
- **3** Write down four organs that can be transplanted.
- **4 a** What does a dialysis machine do?
 - **b** What organs normally do this job?
- **5** a Who carried out the first heart transplant?
 - **b** How long did the person who received this heart survive?
 - **c** Why did he die?
- **6** How do doctors ensure that a transplanted organ works successfully?



knowledge, literacy