

You are going to read a magazine article about computerised patients. Choose from the list (A-H) the sentence which best summarises each part (1-6) of the article. There is one extra sentence which you do not need to use. There is an example at the beginning (0).

- A It is now possible to show patients what will happen to them during surgery.
- B The amount of information meant that it was impossible to send quickly.
- C Very realistic images will help prevent errors during surgery.
- D A donated body made it all possible.
- E Doctors are now looking for more bodies to put on computer.
- F The ease with which the disk can be used means it is very popular.
- G The tiniest details were put on camera for the computer image.
- H Movement of the body image will aid surgery.

## It's Almost Human

Detailed computer images are improving our approach to surgery.

0

D

Doctors in Europe will soon be able to train and practise their skills on a computerised patient that can move and be very flexible on screen. The body which was used to create these images was that of a man who died recently in America and donated his body to medical science.

1

As soon as he died, his body was frozen. By a special process, his body was photographed, layer by layer, in colour. As each layer is only one millimetre thick, the body is shown in great detail. Altogether, 2,100 photographs were taken, and the addition of scanned images finally produced a total of 10,000 colour pictures.

2

American scientists first produced the photographic images of the body and then made them available over the International Computer Network in July. But there was so much information, 32 billion bits of it in fact, that it would have taken more than a week to send all of it through the standard network.

3

Now the information, which was originally on 22 CD's, has been compressed onto a single CD-Rom disk that can be used on standard desktop or portable computers. Because it is so widely available and so easy to operate many doctors in Europe are now making use of it.

4

A doctor in France, who specialises in face and neck operations at the Medical Surgical Centre says that he has been using these computerised images to demonstrate to patients what has to be done during their operations. He also uses the computer images to teach other doctors. He thinks that the pictures are very useful because they give a full picture of the body, but believes that captions describing parts of the body would be helpful.

5

The real step forward however, would be if they could move the body around on a computer screen. The experts are working on this though. They believe that being able to see such things as a heartbeat and the movement of other body organs will enable doctors to practise new methods of operating, before working on real-life patients. Once such changes have been made, the system could become the most popular way of planning an operation and also of teaching future surgeons.

6

Now that a man's image has been created for the computer, a woman is the next step. The body of a 59-year-old woman who died of a heart attack is being used to achieve this. She will be ready for the computer screen in December. The final goal however, is to create such a life-like model on computer that doctors will be able to perform operations on it. This will greatly reduce the risk of making a mistake on a real patient.