

A day in the working life of a cardiac clinical physiologist

WestSide spends a day with Wing-See Cheung

Cardiac clinical physiologists carry out diagnostic procedures on people with suspected or known heart problems.

"I'm not sure what got me interested in matters of the heart, although I guess my medical sciences degree at Leeds University pointed me in the right direction. It is not the

recently, he had a pacemaker implanted at Hammersmith Hospital. Using a computerised programmer, which communicates with the pacemaker, I run a series of tests on the device to find out how much capacity is left in the battery and to check it is doing its job properly, fine-tuning it as necessary. This appointment lasts 30 minutes and the patient has slept

fractures, or a depleting battery, which will result in part or all of the pacing system being replaced.

12.30am

Off to the staff room for lunch and a catch up with colleagues.

1.00pm

During my hour-long stint covering ECGs (electrocardiograms) I do a quick dash over to Queen Charlotte's to test a premature baby. An ECG is a simple method of recording the rhythm and electrical activity of the heart. Small electrodes are attached to the body and connected by wires to the ECG recorder. The team at Charlotte's has detected possible abnormalities in the baby's heartbeat and calls me to provide an assessment. It's always more tricky there as the patients are so tiny, leaving little space for the electrodes! Test completed - I electronically file a copy of the ECG and give one to the Charlotte's team.

2.00pm

Exercise ECG is used to assess how the heart responds to exertion. It involves the patient walking on a treadmill, which is programmed to increase in speed and gradient. During the test I record the ECG and monitor the patient. I work with cardiac sister Valerie Patient, who explains the procedure and asks the first patient, who had a heart attack a week ago, to sign

4.00pm

The exercise testing finishes a little earlier than normal leaving time to catch up on Holter analysis. These are 24-hour monitors used to diagnose symptoms such as palpitations, that occur infrequently. The patient is fitted with electrodes and an ECG recorder (the size of a Walkman) and they are asked to continue with life as normal. I analyse the results using a specialised IT system to find out where there is a malfunction, so that a treatment plan can be worked out.

4.45pm

I'm on call tonight in the cardiac catheterisation labs, where the invasive procedures take place, so it's time to take over from a colleague. On call is one week in five. A patient is having an urgent coronary angiogram having transferred from another hospital. The angiogram shows he has a blockage in one of his arteries which is treated by inflating a small balloon within the blocked area to stretch the narrowing. This procedure is called angioplasty, and my role is to monitor the patient. It's all going well, so I shouldn't be too long. I just hope I won't be called out during the night...but in matters of the heart you just can never tell!"



most highly publicised of professions - even I used to think doctors and nurses performed the role. But, it's such a specialised and technical clinical scientific role that it has become a fascinating profession in its own right and one that I love being a part of.

8.45am

First thing on a Wednesday we have an informal teaching session with consultant cardiologist, Dr Peter Bourdillon. As a team we review and discuss recent patient cases - which is a good learning opportunity and we use the session to catch-up and discuss any department changes.

10.00am

The pacemaker clinic is one of my favourite areas, because of the direct patient contact and the fact that it tests my technical know-how. The first patient of the day brings his wife for support. He had a triple bypass 15 years ago, at which time he says he gave up smoking. More

through about half of it!

The next patient is more alert! He had his pacemaker fitted three months ago and has come for his second visit. After the three-month check-up patients are reviewed at six to nine monthly intervals. I switch programmers, as his pacemaker is a different brand. We use four programmers mainly, but have around 12, as there are many different pacemakers around today. No real problems amongst this morning's seven patients. Most complications tend to occur in the first few months, the commonest being pacing lead displacement, which can be due to excessive arm movement after the implant. Other problems that can occur over time are lead



For comments or contributions contact Nuala or Tara on ext 33005/2.