BBC

MRI scans 'are better for heart checks', experts say

Magnetic resonance imaging (MRI) scans should be used to assess patients with suspected heart disease, rather than standard checks, experts say.

[**A University of Leeds study**](http://press.thelancet.com/mrichd.pdf) of 750 people found MRI was better at detecting the condition, and of ruling it out in unaffected patients.

MRI was also non-invasive and did not use radiation, unlike the usual tests.

A spokesman for the British Heart Foundation, which backed the study, said MRI should be used more widely.

CHD is caused when vital arteries serving the heart become narrowed or blocked by a build-up of fatty substances.

This can lead to severe chest pain, known as angina, and if the condition worsens and remains untreated, patients may have a heart attack.

**Expertise**

Patients with suspected angina are currently most likely to have either an angiogram - an invasive test where dye is injected directly into the heart's arteries - or a non-invasive imaging test called SPECT.

Angiograms and SPECT tests both involve ionising radiation.

MRI scans, which use strong magnetic fields and radio waves to produce a detailed image of the inside of the body, are already widely used to help diagnose other conditions.

In the five-year, £1.3m study published by The Lancet, patients with suspected angina and at least one risk factor for heart disease underwent both kinds of imaging test.

The results were compared using an angiogram.

Dr John Greenwood, who led the study, said: "We have shown convincingly that of the options available to doctors in diagnosing coronary heart disease, MRI is better than the more commonly-used SPECT imaging test.

"As well as being more accurate, it has the advantage of not using any ionising radiation, sparing patients and health professionals from unnecessary exposure."

Prof Peter Weissberg, medical director at the British Heart Foundation, said: "For patients suffering with chest pains, there are a number of tests that can be used to decide whether their symptoms are due to coronary heart disease or not.

"This research shows that a full MRI scan is better than the most commonly used alternative - a SPECT scan using a radioactive tracer."

He added: "MRI has the additional advantage that it doesn't involve radiation.

"At present, not all hospitals have the expertise to undertake such scans but these findings provide clear evidence that MRI should be more widely used in the future."

And in a commentary in the Lancet, Dr Robert Bonow of Northwestern University in Chicago, said the improved accuracy of MRI "must be balanced against availability and cost-effectiveness".