Persantin myocardial perfusion scan

This is a test to assess the blood supply to your heart muscle and to compare the difference between rest and exercise.

The procedure is undertaken in 2 parts, normally on 2 separate days normally 2 - 10 days apart. Each visit will last about 2 - 3 hours.

As this is an expensive procedure please inform us as soon as possible if you are unable to attend for either appointment.

If you are taking the drug dipyridamole or persantin please contact the department immediately.

Part 1 - persantin (pharmacological stress test)

Preparation
Please have nothing to eat 4 hours before your appointment time and drink only water or fruit juice. Do not eat or drink anything that has caffeine in it, i.e. chocolate/tea/coffee/coke 24 hours before your first appointment time.

STOP taking these caffeine containing foods and medicines:
- Tea, coffee, coke, Lucozade, chocolate, cocoa.
- Medicines containing caffeine available over the counter: Anadin maximum, Beechams powder, coldrex tablets, lemsip capsules, Solpadine.

This is not a complete list. If in doubt check the label or contact the department before the scan.

If you are taking any of the medication listed below, then please STOP taking them 48 hours before the test. IF YOUR TABLETS ARE NOT ON THE LIST, CONTINUE TAKING THEM.
Please bring your medications with you.

On the day of your test it is advisable to wear loose comfortable clothing.

You will receive an injection to stimulate the blood flow to your heart and an ECG recording will be made of your heart. After 8 minutes you will then be given a small injection of a radioisotope through the same needle in the vein in your arm. After this you must have something to eat, (you may provide your own food or restaurant facilities are available).

You will then be asked to return to the Nuclear Medicine Department at a given time. Your heart will then be scanned using the gamma camera. This involves lying on a couch with your arms above or behind your head and a camera will rotate slowly around your chest for 25 minutes.
Part 2 - rest test: 2 - 10 days later

Preparation
Please have nothing to eat 4 hours before your appointment time and drink only water or fruit juice.

You will be given a small injection of radioisotope in a vein in your arm whilst at rest (e.g. sitting in a chair) and then asked to have something to eat. After a short wait of about ¾ hour you will need to return for another scan.

Are there any risks involved with this test?
There are a few adverse reactions to the injections used for this scan. As with any injection there is a risk, e.g. bruising.

There is only one serious reported adverse reaction every 2 - 3 years in the UK, from the ¾ million radioactive injections per year. A few patients experience a warm feeling or a transient metallic taste.

The risk of serious complication during the “persantin” test is 1 in 4,000 (0.05%), but all necessary precautions and back-up procedures are always in place. A number of patients experience headache or dizziness during this injection.

Radiation risks
This scan involves using radioactive materials and possibly x-rays, and so has the usual risks associated with ionising radiation. The amount of radiation used is roughly equivalent to that which you receive from natural background radiation in about 3 years. This adds very slightly to the risk of, for example, developing a cancer. However, as one in three of us will develop a cancer at some stage during our lives, the added risk is very small. Indeed, the risks from missing a serious disorder by not having the scan are considerably greater.

Female patients who are or might be pregnant, or who are breastfeeding, must inform a member of staff before the procedure.

If possible, please avoid close and prolonged contact with pregnant mothers, babies and children for 12 hours after the procedure. This helps to avoid exposing them to any unnecessary radiation. The possible radiation dose to them is very small, but it is sensible to reduce this to a minimum.

Are there any alternative treatment options?
Your consultant has recommended this procedure/treatment as being the best option. However, the alternatives to this procedure/treatment are Cardiac angiogram or CT angiogram. If you would like more information about this/any of these, please speak to your consultant or a member of staff caring for you.

There is also the option of not receiving any treatment at all.

The consequences of not having this investigation are that your consultant may not have a full understanding of the cause of your symptoms and hence may not be able to offer you the best appropriate management. If you would like more information please speak to your consultant or a member of staff caring for you.
References
EANM/ESC procedural guidelines for myocardial perfusion imaging in nuclear cardiology (2005)
Available at: www.eanm.org/publications/guidelines (last accessed October 2012).

If you have any queries, or require further information please contact the Nuclear Medicine Department, Royal Derby Hospital on 01332 788197.

Any external organisations and websites included here do not necessarily reflect the views of the Derby Hospitals NHS Foundation Trust, nor does their inclusion constitute a recommendation.

© Copyright 2012 All rights reserved. No part of this publication may be reproduced in any form or by any means without prior permission in writing from the Patient Information Service, Derby Hospitals NHS Foundation Trust. (P0653/11.2010/V4)