Information for patients

This is to provide information to patients receiving a Nuclear Medicine SPECT CT scan.

What is a SPECT CT Scan?

A SPECT CT scan is made up of 2 separate components, a SPECT scan and a CT scan. The images from each scan are fused together. The fused images can provide more accurate information about the anatomy and function of the area being scanned. For example, in areas such as the spine or feet, it can be difficult to determine from the Nuclear Medicine imaging alone whether the abnormality lies in the bone or the adjacent joints. The fusion of SPECT with CT images provides added confidence in identifying and localizing the problem.

Single Photon Emission Computed Tomography (SPECT): SPECT images are obtained following an injection which contains a small amount of radioactivity. This is used to determine how an area of the body is functioning. During the SPECT procedure a special camera rotates in a 360 degree arc allowing for reconstruction of three dimensional images.

Computed Tomography (CT): CT images are obtained while you lie on the same imaging bed. The bed slides through the centre of the scanner. Again, the scanner rotates over a 360 degree arc allowing for three dimensional image reconstruction. This shows the anatomy of the area under investigation.

Preparation for the SPECT CT Scan

No preparation is required for a SPECT CT scan other than we ask you to be well-hydrated.

It is important that you notify the Nuclear Medicine staff if you are (or think you could be) pregnant or are breastfeeding on the day of the scan. This study may not be suitable for pregnant women because of the radiation dose to the growing foetus. Women who are breastfeeding or looking after very young children will be given appropriate advice by the Nuclear Medicine staff. This is because a small amount of radioactivity may be released from the body for a period of time after the scan.

The SPECT CT Scan

The appointment times for a SPECT CT scan may mean that you are in the department for a period of 3 to 4 hours. The scan time can be variable depending on the area(s) under investigation. The first stage of the scan will be the SPECT followed by the CT scan. It is very important that you remain still for the entire duration of the two studies so that the SPECT and CT can be accurately combined. If you are unable to lie still, the images from the SPECT study will not correspond to the images from the CT study. This may lead to a
mislireinterpretation of the scans. It is therefore important that you inform us if feel that this may be a problem. We will make every effort to make you as comfortable as possible prior to the scan.

**After effects of a SPECT CT scan**

There are no known after-effects from a SPECT CT scan. We request that you continue to hydrate yourself and empty your bladder frequently for a period of 24 hours post scan. This allows the radioactivity to be discharged from the body through your urine reducing the small radiation dose received.

**Results of the SPECT CT scan**

The SPECT CT images will be reported by a Nuclear Medicine Radiologist and the report will be forwarded to your referring doctor thereafter.

**Who should you contact if you have a problem?**

Monday to Friday, 8am to 4.30pm – please contact Nuclear Medicine SPECT CT Department on 01895 279368. Out of hours you should contact your GP.

**Languages/ Alternative Formats**

Please ask if you require this information in other languages, large print or audio format. Please contact: 01895 279973

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Jeżeli chciałbyś uzyskać te informacje w innym języku, w dużej czcionce lub w formacie audio, poproś pracownika oddziału o kontakt z biurem informacji pacjenta (patient information) pod numerem telefonu: 01895 279973.

**Ref: PIID**

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