Information about your Sestamibi Parathyroid scan

This leaflet provides information to patients about undergoing a Sestamibi Parathyroid scan.

What is a Sestamibi Parathyroid Scan?

A Sestamibi Parathyroid Scan is a diagnostic examination to determine the anatomy and function of your parathyroid glands. These are four small glands embedded in the back surface of the thyroid gland, which is situated in the front of your neck.

To investigate how your parathyroid glands are functioning you will have to attend the hospital for two scans over two days:

- Day 1: SPECT CT Parathyroid Scan
- Day 2: Ultrasound Scan

How do I prepare for a Sestamibi Parathyroid Scan?

There is no special preparation necessary prior to the scan. You may eat and drink as normal.

However, it is important that you inform the Nuclear Medicine Department if you are **breast feeding** or are (or think you could be) **pregnant**. This study may not be suitable for pregnant women because of the radiation dose to the growing foetus. If you are taking thyroid medication you may need to stop taking these before you have the scan. Your doctor will advise you about this.

You will not be asked to change your clothes but will be requested to remove any jewellery around the neck prior to the scan.

What happens during a Sestamibi Parathyroid Scan?

On the first appointment date, scans will be taken of your parathyroid glands 10 minutes and 90 minutes after your radioisotope injection.

Ten minutes after the injection, a dual-headed gamma camera will be used to detect the Sestamibi radiopharmaceutical that your parathyroid glands will have absorbed. It will come quite close to your head but will not touch you at any point and you will be asked to remain quite still. The duration of the first scan is 20 minutes.

90 minutes after the injection, a series of scans will be taken which include SPECT CT (Single Photon Emission Computed Tomography) 3-dimensional images. The camera will rotate over a 360 degree arc around you, allowing for reconstruction of an image in three dimensions. This second scan will, in total, take approximately 45 minutes after which you can go home.

On the second appointment date you will be asked to attend the Ultrasound Department for a scan of your parathyroid and thyroid glands.
Are there any side effects of a Sestamibi Parathyroid Scan?

There are no side effects of the injection. You will be able to drive, travel by public transport and return to work if necessary.

You may experience a metallic taste in your mouth (but only for a few minutes) when you receive the radioisotope injection.

What are the risks of a Sestamibi Parathyroid Scan?

There are no risks having a Sestamibi Parathyroid Scan.

What are the benefits of a Sestamibi Parathyroid Scan?

The parathyroid scan will determine if you have hyperactive parathyroid glands.

Where is a Sestamibi Parathyroid Scan performed?

A Sestamibi Parathyroid Scan is only performed in the Nuclear Medicine Department which is situated in the X-Ray Department. On arrival, please report to Reception.

Who can accompany me for the scan?

We would prefer that you do not bring more than one person with you.

When can I expect the results of my Sestamibi Parathyroid Scan?

The results of the scan will be sent to the doctor who requested the study. You will receive the results when you next attend your outpatient appointment.

If you have any further questions please do not hesitate to contact the Nuclear Medicine Department on 01895 279368.