Head and Neck investigations – information for patients

Introduction

Your consultant has recommended that you have some tests done in order to help him or her correctly diagnose what is causing your symptoms. You may require one or more of the investigations explained below. Sometimes, tests need to be repeated to ensure the correct diagnosis is made. You will receive detailed information about the tests and investigations you need, with your appointment letter. These will outline the benefits, risks, and any alternatives of the procedure(s) that have been recommended for you. If you do not receive this information, please ask a member of the medical team looking after you. This booklet is not meant to replace the discussion between you and your consultant but helps you to understand more about what is discussed.

The following tests and investigations will be carried out in the outpatient clinic:

Blood tests

These are usually done to assess your general state of health, to check whether you are anaemic and to see how organs such as your liver and kidneys are working.

Chest X-ray

This will be performed to assess your general fitness and to check your heart and lungs.

Nasendoscopy

This is a short procedure, which may be carried out in the outpatient department. The doctor or speech and language therapist will use a flexible telescope (a very thin flexible tube with a light at the end), to examine the back of your mouth and throat. The tube slides through your nose to view your throat and voice box. This may be uncomfortable, but will only last a few minutes. You may be given a local anaesthetic in the form of a spray, which numbs the back of your throat. If you are given a local anaesthetic to your throat you should not eat or drink anything for about an hour afterwards until your throat has lost the numb feeling. This is because there is a risk of food or drink going into your windpipe when you swallow, or of scalding your mouth or throat with hot drinks.

Fine needle aspiration (FNA)

A small needle is passed gently into the swelling or lump in the neck. From this small pieces of tissue are taken and examined under a microscope to check if there are any cancer cells present. This procedure takes only a few seconds and can be carried out in the outpatient department. Generally there are no after effects but occasionally there may be slight bruising. You will be given an appointment to come back and see the doctor for the results in three weeks.

Biopsy

Sometimes, in order to reach a diagnosis, the consultant may need to examine a tissue sample under a microscope. To do this it is necessary to remove a small piece of the ulcer or lump. It can

be done during an endoscopy (a procedure which looks at the inside of body cavities), under ultrasound with a fine needle, or with minor surgery. A biopsy may be carried out in the outpatient department with a local anaesthetic (numbing a small part of your body) or in the operating theatre with either a local or a general anaesthetic (being put to sleep). If you have a general anaesthetic you may need to stay in hospital overnight.

Barium meal/swallow
This is an X-ray to produce pictures of the gullet and stomach. You may be asked not to eat or drink for a number of hours prior to the test. You will be given a special chalky drink during the investigation so that the structure of the gullet and stomach can be visualised.

Video fluoroscopy
This is a special X-ray to examine the way in which your swallow functions. You will be asked to swallow different consistencies of food and drinks to which barium has been added. It usually takes about 10 minutes and you do not need to starve beforehand.

Ultrasound scan
Ultrasound uses sound waves to build up a picture of the inside of your body. Ultrasound imaging is painless, fast and easy. You will be asked to lie on your back on an examining table. A gel is put onto the skin in the area to be scanned and a probe is passed over that area. There may sometimes be varying degrees of discomfort from pressure as the probe moves over your skin. For some scans you may be asked not to have anything to eat or drink for up to 12 hours prior to your appointment. The examination usually takes about 10–20 minutes. Ultrasound may also be used to guide a biopsy or a fine needle aspiration if this is needed to assist in the diagnosis.

Bone scan
A bone scan shows up abnormal areas of bone more clearly. A small amount of a mildly radioactive substance is injected into a vein, usually in your arm. Abnormal bone absorbs more radioactivity than normal bone so these areas are highlighted and picked up by the scanner as ‘hot spots’. There is generally a wait of approximately 2-3 hours between receiving the injection and the scan-taking place. The radioactivity used in these scans is very low, not harmful and disappears from the body within a few hours.

CT scan (computerised tomography)
A CT scanner is shaped like a doughnut and you will be required to lie on a couch that will move you through the machine.

This test uses a rotating X-ray beam to create a series of pictures of the body from many different angles. Sometimes you will be asked to swallow a dye or given an injection of dye, which allows particular areas to be seen more clearly. Please inform your doctor before the scan if you are diabetic, or suffer from any kidney problems. The injection may make you feel hot all over for a few minutes.

Before having the drink or injection, it is important to tell your doctor or the person doing the test if you are allergic to iodine or have asthma.

CT scans take about 10 minutes and are painless. You will be able to go home when the scan is over and you can drive afterwards. CT scanning offers detailed views of many types of tissue including the lungs, bones, soft tissues and blood vessels. Occasionally this test may be used to guide a biopsy procedure to help the diagnosis.

As CT scanners use X-rays, women should always inform their consultant or X-ray technologist if there is a possibility that they are pregnant.

There is a very small risk of an allergic reaction to the contrast injection used with CT scanning. The risk of serious allergic reaction to iodinecontaining contrast material is very rare and radiology departments are well equipped to deal with them.

MRI scan (magnetic resonance imaging)
This is a scan that uses magnetism to build up a picture of the organs inside the body. It is completely painless, rather noisy and takes approximately 30 minutes. Prior to the scan you will be injected with a special dye to help make the pictures clearer. You should tell the doctor if you have a pacemaker or any metal parts inside your body such as joint replacements or surgical clips as this may mean you cannot have this type of scan. During the scan you will be asked to remain as still as possible, in a confined space. In a small number of cases patients can find this claustrophobic and if this is a concern for you then please discuss this with your consultant. If you wish, it is possible for us to prescribe a sedative (a drug that calms) for you. MRI is generally avoided in the first 12 weeks of pregnancy – whilst a definite risk to pregnancy has not been proven in early pregnancy, in general this type of scan is avoided until mid or late pregnancy.

PET-CT scan (positron emission tomography with computerised tomography)
A PET-CT scan is a diagnostic examination that involves a very small amount of radioactive drug being given to you, usually through an injection into your arm. The radioactive drug will go to certain parts of your body. The PET scanner measures the radiation that is being emitted by the radioactive drug within you. In this way, the PET scanner can make 3D images that show where the radioactive drug went to in your body.

On the day of your scan you will be advised not to eat or drink anything for six hours prior to your appointment (except water). You will be given an injection of radioactive sugar into a vein that will feel similar to a blood test. There are no side effects from the injection and it will not make you feel any different. After receiving the injection you will need to rest and remain lying down for one hour while the injection is absorbed into your body. Once the radioactive tracer has been absorbed into your body, you will be ready for the scan.

In the scanning room, you will be asked to lie down on your back on the scanning bed. The bed will move through the ring of the scanner and collect images for between 30 -60 minutes, depending on the type of scan. Because the radioactivity is short lived, your radiation exposure is low. The substance amount is so small that it does not affect the normal processes of the body. If you are pregnant or breast feeding, you should inform the staff, as the baby or foetus may be exposed to radiation.

Dental assessment
You may be advised to have a dental assessment and treatment before having surgery or radiotherapy (radiotherapy is an X-ray treatment that uses high energy rays to damage or kill cancer cells). This is because radiotherapy can adversely affect the teeth, gums, bone supporting the teeth and saliva which protects the teeth and moistens the mouth. It is important therefore to check whether your teeth are in their best possible condition before receiving radiotherapy.

Information for Patients

Inpatient tests and investigations:

Microlaryngoscopy and biopsy/rigid endoscopy

You may be asked to attend the hospital as a day case or for an overnight stay. You will be given a general anaesthetic before the procedure. While you are asleep the doctor will examine your voice box (larynx), vocal cords and surrounding areas more closely. A small biopsy (sample of tissue) may be taken for examination under the microscope. This may make your throat sore for a couple of days but you can be given tablets for the soreness if required. You will be asked to attend the outpatient clinic after 7–10 days, when the doctor will have the results of your biopsy.

Panendoscopy

You may be asked to attend the hospital as a day case or for an overnight stay. Once admitted you will be given a general anaesthetic. While you are asleep the doctor will be able to examine the inside of your mouth, the back of the throat (pharynx), the base of the tongue, the postnasal space (the area at the back of your nose) the voice box (larynx), your food pipe (oesophagus), windpipe (trachea), and breathing tubes (bronchi). Biopsies (tissue samples) may be taken from any abnormal looking areas and also from the postnasal space and base of tongue (where there can be tumour tissue that is not always obvious to the naked eye). Sometimes the panendoscopy may also include removal of your tonsils if there is any suspicion that they may contain cancer. This may make your throat sore for a few days and you will be given tablets to help with this if required. You will be asked to attend the outpatient clinic 7–10 days after your test, when the doctor will have the results of your biopsy.

It is important that you make a list of all medicines you are taking and bring it with you to all your follow-up clinic appointments. If you have any questions at all, please ask your surgeon, oncologist or nurse. It may help to write down questions as you think of them so that you have them ready. It may also help to bring someone with you when you attend your outpatient appointments.

Local sources of further information

You can visit any of the health/cancer information centres listed below:

Sandwell and West Birmingham Hospitals NHS Trust
The Courtyard Centre Sandwell General Hospital (Main Reception)
Lyndon, West Bromwich, B71 4HJ
Telephone: 0121 507 3792 Fax: 0121 507 3816

University Hospitals Birmingham NHS Foundation Trust
The Patrick Room Cancer Centre Heritage Building
(Queen Elizabeth Hospital Birmingham) Edgbaston,
Birmingham, B15 2TH
Telephone: 0121 371 3537/39

About this information

This guide is provided for general information only and is not a substitute for professional medical advice. Every effort is taken to ensure that this information is accurate and consistent with current knowledge and practice at the time of publication.

If you require this information in another format, such as a different language, large print, braille or audio version please ask a member of staff or email interpreting.service@uhb.nhs.uk.