



STAGE 2 MELANOMA

What are the aims of this leaflet?

This leaflet provides you with information about stage 2 melanoma. In particular, it tells you what a stage 2 melanoma is, what will be the investigations/treatments and where to find out more information. It has been prepared in response to some of the questions people with melanoma often ask.

What is melanoma?

Melanoma is a type of skin cancer, which arises from the pigment cells (melanocytes) in the skin. In a melanoma skin cancer the melanocytes become malignant and multiply excessively. One of the most important causes of melanoma is exposure to too much ultraviolet light in sunlight. The use of artificial sources of ultraviolet light, such as sunbeds, also increases the risk of getting a melanoma.

Melanocytes make a brown/black pigment (known as melanin), and often the first sign of a melanoma developing is a previous mole changing in colour or a new brown/black lesion developing. Most frequently there is darkening in colour but occasionally there is loss of pigmentation with pale areas or red areas developing. This melanoma on the skin is known as the primary melanoma.

Melanoma is considered to be the most serious type of skin cancer because it is more likely to spread (metastasise) from the skin to other parts of the body than other types of skin cancer. If melanoma has spread to other parts of the body, those deposits are known as secondary melanoma (secondaries/metastases).

Diagnosis and initial treatment

Although a diagnosis of melanoma can be serious, most melanomas are caught at an early stage and so do not cause any further problem. If lesions are not caught at the early stages then there is a higher risk of the melanoma spreading, which can reduce life expectancy.

The initial treatment for a suspected melanoma is to cut out (excise) all of the melanoma cells. When the lesion is first removed, we do not know for sure if it is a melanoma or not and if it is a melanoma how thick it is, so the excision is usually done with narrow margins (the area of normal skin around the suspected melanoma). The specimen that is cut out from the skin is sent to a laboratory, so that a pathologist can examine it under the microscope. Pathologists look to see if what has been removed is a melanoma and how thick it is. This is the only way a diagnosis of melanoma can be confirmed.

What is stage 2 melanoma?

Doctors use a staging system for melanoma to indicate both the outcome and the best treatment. The system used in the UK stages melanoma from 1 to 4. [Stage 1](#) is the earliest melanoma and [stage 4](#) is the most advanced. The staging system takes into account if there has been any spread of melanoma from the skin to other parts of the body. Stage 1 and 2 melanomas are present in the skin only and have not spread elsewhere in the body. [Stage 3](#) and 4 melanomas are those that have spread to other parts of the body.

The pathologist will look under the microscope to measure certain features of the melanoma. These include the thickness of the melanoma (called Breslow thickness, after Dr Breslow who described it), which measures how far the melanoma cells have grown (or invaded) down into the layers of skin. The pathologist will also note other special features under the microscope. These findings are then summarised in a pathology (histology) report. This is used as part of the staging process and according to this system you have been diagnosed with stage 2 melanoma. Stage 2 is considered a thick melanoma. You can discuss this in more detail with the medical team looking after you if you would like to know more.

What happens next?

A team of experts (including dermatologists, surgeons, pathologists, a doctor specialising in cancer treatment and specialist nurses) will meet to discuss the best treatment option(s) for you. A member of the team will explain those options and you may also meet a melanoma/skin cancer clinical nurse

specialist (CNS) who may be the point of contact for you and advise you accordingly.

How is stage 2 melanoma treated?

Removing the melanoma from the skin by surgery offers the best chance of a complete cure, and this treatment alone is usually successful in stage 2 melanoma. Most patients do NOT need either radiotherapy or chemotherapy.

After the melanoma was initially removed for histological diagnosis you will usually be offered a second surgical procedure to remove more skin from around and beneath the melanoma scar. This second procedure typically removes a further 1cm margin of skin around the first scar site. It is called a Wide Local Excision (WLE) and is usually carried out under local anaesthetic (via an injection to numb the skin). Your doctor will discuss with you how much skin will need to be removed as the recommended margin depends on the thickness of the melanoma. The purpose of this further surgery is to try and make sure that no cancer cells are left behind in the nearby skin.

What scar(s) can I expect following a wide local excision?

The type of scar(s) will depend on location and the type of surgical technique required. The WLE might result in a scar similar in shape but bigger in size than the one that was left by cutting out the original melanoma. Some scars can be more complex in shape because a “flap” or skin graft was required. Further information on flaps and grafts can be found via the website links given at the end of the leaflet.

What is a sentinel lymph node biopsy?

Patients with a stage 2 melanoma might benefit from a further staging test called a sentinel lymph node biopsy. The reason is that if a melanoma does spread, then it usually spreads to the nearest lymph nodes (also known as lymph glands). So a melanoma on the leg could spread to the lymph nodes in the groin, or a melanoma on the back could spread to the lymph glands under the arms or in the groin. It usually goes to the closest lymph node.

A sentinel node biopsy is currently an optional test to see whether there has been spread of a small number of melanoma cells to those glands. The cancer cells can be so small that they cannot be felt, or seen on a scan, and so the sentinel node biopsy is the most accurate way of detecting any spread of melanoma cells.

A sentinel lymph node biopsy is not routine for all patients, but if your doctor recommends it according to the national guidelines for offering this test, it is usually carried out at the same time as the WLE, under general anaesthetic (while you are asleep). The first part of a sentinel lymph node biopsy involves injecting a radioactive liquid into the skin near to where the melanoma was located. Only a small amount of radioactivity is required which is not harmful to you or to anyone else. A scan is then carried out to see which node or nodes the liquid reaches. This identifies the closest lymph node to the melanoma (the sentinel node) and the one most likely to contain melanoma cells.

The second part of the test takes place at the time of the WLE when the surgeon injects blue dye into the same place that the radioactive liquid was injected. This makes the node visible to the surgeon. The combination of the radioactive liquid and blue dye is the best way to identify the sentinel node. The surgeon removes that node (or in some cases 2-3 nodes) and the pathologist then looks for melanoma cells in the node under the microscope. It can take around 3-4 weeks before the results are available.

The result is called positive if melanoma cells are found. The patient is then usually advised to have all the nodes in that area of the body removed. This subsequent surgery is called a “completion lymphadenectomy or lymph node dissection or lymph node clearance”.

Sentinel lymph node biopsy remains optional because there are advantages and disadvantages to the procedure. Some of the possible advantages include:

- It gives more information. If the test is negative only around 15% of patients have further trouble from their melanoma. A negative sentinel node biopsy result is therefore reassuring but does not mean the melanoma will definitely not come back. If the result is positive then patients are diagnosed with [stage 3 melanoma](#) and patients have around a 50% chance of recurrence of their melanoma.
- A positive result may make patients eligible for clinical trials of new drugs designed to improve prognosis.
- Patients who have a positive sentinel node biopsy may have sooner or later developed a lump to feel there, and the evidence suggests that the surgery to remove the nodes is better tolerated by the patient earlier rather than later when the lump is bigger.

Some of the possible disadvantages include:

- There is no evidence so far that sentinel lymph node biopsy improves the chances of survival.
- Having a sentinel lymph node biopsy usually means having to have a general anaesthetic whereas wide local excision alone can usually be done with a local anaesthetic.
- Another scar is created and sometimes several scars if more than 1 lymph node shows up on the scan.
- Sampling/removing lymph nodes may leave a swelling called a seroma, which is an accumulation of fluid that cannot drain through the lymphatics as it once did before the surgery. Seromas usually take a while to settle after surgery. Extremely rarely the seroma might persist.
- Occasionally there may be some permanent swelling of the limb called lymphoedema.

What is the risk of stage 2 melanoma recurring?

A diagnosis of stage 2 melanoma means it has been caught relatively early and most patients don't have further recurrence of their melanoma once treated. If you want to know more precisely the chances of your melanoma recurring, talk to your dermatologist and/or your CNS.

After treatment, why am I followed up?

Patients are routinely followed up in the out-patient clinics after the completion of the WLE for three reasons:

- 1) To check that the melanoma has not come back or spread.
- 2) To detect new melanomas or other skin cancers.
- 3) To provide support, information and education.

How often and for how long will I be followed up?

The follow up plan should be agreed between you and your dermatologist and/or the surgeon who did the WLE and/or sentinel lymph node biopsy. Depending on the stage of your melanoma, you will most likely see either your doctor or CNS every 3 or 6 months, for 5 years. It is not unusual for your follow up to be shared between the different doctors, and/or a CNS, involved in your care.

How will a recurrence of the melanoma or a new melanoma be detected?

Your doctor will want to examine the area of your melanoma scar and also check your lymph nodes (glands). They will also ask to examine your entire skin to make sure there are no signs of any new melanomas. Photographs might be taken to help compare the way your moles look now with how they looked before and will be kept in your notes if you agree. If a new or recurrent melanoma is suspected then, as before, it will most likely be removed surgically.

What makes somebody more at risk of developing a new melanoma?

One of the biggest risk factors is a strong family history of melanoma (3 or more family members affected). The following are also risk factors:

- Having fair skin that burns easily in the sun, freckles and/or red hair.
- A history of severe sunburn, especially sunburn that caused blisters, occurring in childhood.
- A “weaker” family history of melanoma, i.e. only 1 or 2 other family members affected.
- A large numbers of moles, and moles which are large and irregular in colour and shape (‘atypical” moles).
- Having a very large dark birthmark (a giant congenital mole)-
- Having already had a melanoma.
- A weakened immune system (for example, because of treatment with immunosuppressive drugs).

Self care (What can I do?)

Normally, your CNS will discuss the following with you after treatment:

You can examine your skin

Most patients do not develop further melanomas; however, some do and they may also develop other forms of skin cancer. The best way to detect skin cancer is to check all your skin every month (please see Patient Information Leaflet on [early detection](#)). Essentially, you are looking for changes in the size, shape or colour of any moles, a new mole, or a mole that looks different to the others. There are patient information web-packages, which outline how to look after your moles (please see the web links at the end of this leaflet).

Reduce the risk of further melanomas (See BAD leaflet on prevention).

The best way you can reduce risk is to not let your skin burn in the sun. You do not have to hide from sunny days, but you do need to be careful to avoid turning pink and this applies also to any children you have as they are likely to have a similar skin type to you. Information on the best methods of sun protection can be found on the website links provided at the end of this leaflet (see Patient Information Leaflet on [prevention](#)).

Top sun safety tips:

- Protect your skin with clothing, and don't forget to wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Spend time in the shade between 11am and 3pm when it's sunny. Step out of the sun before your skin has a chance to redden or burn.
- When choosing a sunscreen look for a high protection SPF (SPF 30 or more) to protect against UVB, and the UVA circle logo and/or 4 or 5 UVA stars to protect against UVA. Apply plenty of sunscreen 15 to 30 minutes before going out in the sun, and reapply every two hours and straight after swimming and towel-drying.
- Keep babies and young children out of direct sunlight.
- The British Association of Dermatologists recommends that you tell your doctor about any changes to a mole or patch of skin. If your GP is concerned about your skin, make sure you see a Consultant Dermatologist – an expert in diagnosing skin cancer. Your doctor can refer you for free through the NHS.
- Sunscreens should not be used as an alternative to clothing and shade, rather they offer additional protection. No sunscreen will provide 100% protection.
- It may be worth taking Vitamin D supplement tablets (available from health food stores) as strictly avoiding sunlight can reduce Vitamin D levels.

Vitamin D advice

The evidence relating to the health effects of serum Vitamin D levels, sunlight exposure and Vitamin D intake remains inconclusive. Avoiding all sunlight exposure if you suffer from light sensitivity, or to reduce the risk of melanoma and other skin cancers, may be associated with Vitamin D deficiency.

Individuals avoiding all sun exposure should consider having their serum Vitamin D measured. If levels are reduced or deficient they may wish to consider taking supplementary vitamin D3, 10-25 micrograms per day, and increasing their intake of foods high in Vitamin D such as oily fish, eggs, meat, fortified margarines and cereals. Vitamin D3 supplements are widely available from health food shops.

Having had a melanoma may impact on future applications for life or health insurance, particularly for the first five years after diagnosis. If you have particular concerns about this, you should seek financial advice.

Where can I get more advice, support & information about melanoma?

When you have been diagnosed with melanoma you might experience a range of emotions including worry, confusion, or even feeling unable to cope. It will probably help if you discuss and share your thoughts and feelings with someone close. This might be a family member or friend. It could also be your doctor, specialist nurse or another member of the team looking after you.

When you are diagnosed with melanoma, you will be given a lot of information. All this information at once can be hard to take in. If you are not clear about anything during your treatment, please don't be afraid to ask.

Web links to detailed leaflets:

British Association of Dermatologists

- Information on early detection and prevention of melanoma
www.bad.org.uk/site/1260/default.aspx
- Information on sun-safety
<http://www.bad.org.uk/sunawareness>
<http://www.bad.org.uk/sunawareness/factsheet>
- Information on Vitamin D
<http://www.bad.org.uk/vitaminD>

Cancer Research UK (CRUK)

- cancerhelp.cancerresearchuk.org/type/melanoma/

- Information on sun-safety
www.sunsmart.org.uk/

GenoMEL: The Melanoma Genetics Consortium

- Information on looking after your moles and vitamin D
www.genomel.org/patient_information.php

Macmillan Cancer Support

- www.macmillan.org.uk/Cancerinformation/Cancertypes/Melanoma/Melanoma.aspx
- Information on flaps/grafts
www.macmillan.org.uk/Cancerinformation/Cancertypes/Melanoma/Treating%20melanoma/Surgery/Surgery.aspx

National Cancer Action Team (NCAT)/ NHS Choices

- Create your own personalised information
www.nhs.uk/ips
- Information on Vitamin D
www.nhs.uk/Conditions/vitamins-minerals/Pages/Vitamin-D.aspx

For details of source materials used please contact the Clinical Standards Unit (clinicalstandards@bad.org.uk).

This leaflet aims to provide accurate information about the subject and is a consensus of the views held by representatives of the British Association of Dermatologists: its contents, however, may occasionally differ from the advice given to you by your doctor.

This leaflet has been assessed for readability by the British Association of Dermatologists' Patient Information Lay Review Panel

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