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. 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 on the skin. Most frequently, there is darkening in colour but, occasionally, there is loss of pigmentation with pale areas or red areas developing. Sometimes, melanomas have no pigment and appear just a pink/red colour. The development of 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). 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.

How is melanoma diagnosed?

The clinical diagnosis of melanoma is usually made by a specialist (normally a dermatologist or plastic surgeon) by looking at the skin. The initial treatment for a suspected melanoma is to cut out (excise) all of the melanoma cells. Usually this is a minor operation done under a local anaesthetic (via an injection to numb the skin). When the lesion is first removed, although your specialist may feel that it is likely to be a melanoma, the diagnosis needs to be confirmed by examining the tissue removed under a microscope, so the excision is usually done with narrow margins (a thin rim 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 and then confirm the diagnosis of melanoma.

If you have been given this leaflet by your doctor, you will have probably had this initial minor operation and had your diagnosis of melanoma confirmed by the pathologist

What is stage 2 melanoma?

Doctors use a staging system for melanoma to indicate both the likely outcome and the best treatment. The AJCC (American Joint Committee on Cancer) system is currently used in the UK to stage melanoma from 1 to 4. Stage 1 is the earliest melanoma and stage 4 is the most advanced.

The staging system takes into account the thickness of melanoma and 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 have spread towards or have reached the draining lymph glands (nodes) and Stage 4 melanomas are those that have spread beyond the closest draining lymph glands to other parts of the body.

The pathologist will look under the microscope to assess certain features of the melanoma. The most important of all of these is the thickness of the melanoma (called Breslow thickness), which measures how deep the melanoma cells have grown down into the layers of skin. The pathologist uses this measure and some other additional features such as ulceration of the melanoma (seen down the microscope) to create a histology report on your melanoma and we can then work out the AJCC stage.
Stage 2 melanoma is a melanoma that is localised to the skin and the stage can be further divided into stages 2A, 2B and 2C. 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 multidisciplinary team (MDT) of experts will meet to discuss the best treatment option(s) for you. The MDT is made up of dermatologists, surgeons, pathologists, oncologists and specialist nurses. A member of the MDT will explain your treatment options to you, and you may also meet a melanoma/skin cancer clinical nurse specialist (CNS) who would be your point of contact 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 2 cm margin of skin around the first scar site. It is called a Wide Local Excision (WLE) and is usually also carried out under local anaesthetic. 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 and the site of your melanoma. The purpose of this further surgery is to try and make sure that no cancer cells are left behind in the nearby skin and minimising the risk of the melanoma recurring.

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. Occasionally lumpy scars called “keloids” may result and this is more common on upper arms and chest over breastbone. Scars can feel hard and itchy at first but usually will fade and soften with time. Stopping smoking, after any surgery, can improve wound healing.

What is a sentinel lymph node biopsy?

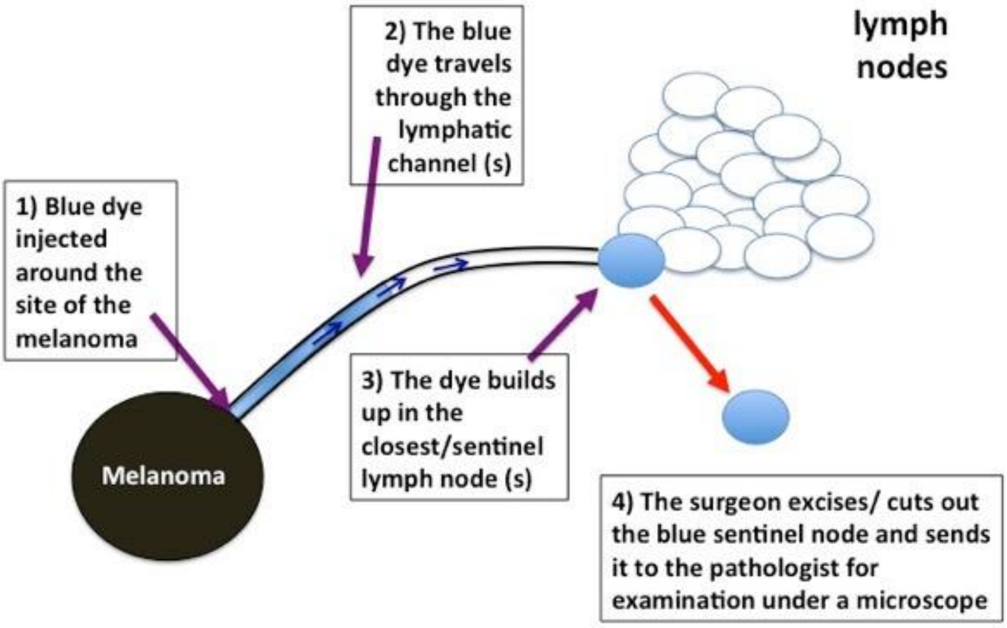
Following your examination with your doctor, stage II melanoma patients may be offered a further staging test called a sentinel lymph node biopsy to detect whether there has been any spread of the melanoma. If melanoma spreads from the skin, it tends to spread first to the nearest lymph glands.

A sentinel node biopsy (SNB) is currently an optional test to see whether there has been spread of a small number of melanoma cells to these nearest lymph glands early before a swelling can be detected by examination.

An SNB is carried out at the same time as the WLE and the procedure will be done under general anaesthetic (while you are asleep). The test involves identifying the nearest gland(s) (which is the sentinel gland) and then removing the gland(s) so that they can be sent to the pathology laboratory for examination under the microscope (see diagram below). It is a very sensitive test as this can detect microscopic melanoma cells that cannot be felt or even seen on a scan.

Before your operation to remove the sentinel lymph glands you will have a lymphoscintogram, which helps your doctors map out your nearest lymph glands. This involves injecting a small amount of radioactive dye into the scar where your melanoma was, followed by a scan which follows the route of the dye into the lymph glands. The position of these glands can then be marked on your skin to help the surgeon accurately identify the correct gland for removal. During the operation, the surgeon will then also inject a blue dye into your scar which also travels into the lymph glands. It is the combination of the radioactive dye and the blue dye which helps to accurately identify the sentinel lymph gland. The surgeon will remove that gland (sometimes nearest 2-3 glands) at the same time as carrying out the WLE. The operation usually takes less than an hour. The WLE skin samples and SNB glands are all sent to the pathology laboratory for further analysis. You are usually able to go home the same day of the operation.

A diagram of the process identifying the sentinel node



The results usually take 4 weeks to come back. If melanoma cells are detected in the gland (a positive sentinel node biopsy) then this changes your stage of melanoma to stage 3. Historically following a positive sentinel node biopsy, patients would be offered a further operation to remove all the lymph glands in that site (called a completion lymphadenectomy/complete lymph gland/node clearance). However new evidence suggests that this further procedure does not improve survival from melanoma. This is therefore no longer routinely recommended

If there is no melanoma in the gland (a negative sentinel node biopsy) you will remain stage 2. A negative result is does not mean the melanoma will definitely not come back but the chances are much lower.

The sentinel lymph node biopsy remains optional because it is not classed as a treatment, but it is recommended as a staging process which gives you more information about your melanoma.

There are advantages and disadvantages to the procedure which can be found in the sentinel lymph node biopsy information link listed below. Complications from a sentinel lymph node biopsy include infection, bleeding, numbness, scarring, seroma (a swelling of fluid that can take a while to settle), small chance of lymphoedema (permanent swelling of the limb) and an allergic reaction to the blue dye can occur in 1 in 1000.

Please discuss this information further with your medical team so that you can make the right decision for you.

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 do not have further recurrence of their melanoma once treated. There are statistics available on the likelihood of melanoma recurrence for each stage of melanoma.

If you want to know more precisely the chances of your melanoma recurring, talk to your dermatologist and/or your CNS. Dealing with details of this and treatment can, however, be difficult to cope with. It may also be difficult to take in everything that the doctor tells you during the consultation. This leaflet is designed to add to the information that the doctor gives you, but your own doctor and their team remain the best source of information for you.

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 common for your follow up to be shared between the different doctors, and/or a CNS, involved in your care.

Patients who have stage 2C melanoma who have not had a sentinel node biopsy, may be offered the possibility of having a CT scan to look for melanoma elsewhere in the body by their doctor.

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 increases the risk of developing a new melanoma?

One of the biggest risk factors is a strong family history of melanoma. (if there are 3 or more members of your family affected by melanoma, then your medical team would discuss genetic counselling with you). The following are also risk factors for developing melanoma:

- A large number of moles, and moles, which are large and irregular in colour and shape (known as atypical mole syndrome).
- Having white 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, for example, only 1 or 2 other family members affected.
- Having a very large dark birthmark (a giant congenital mole)
- Having already had a melanoma.
  A weakened immune system (for example, because of another health condition, or 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. 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 during 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.

Top sun safety tips:

- Protect your skin with clothing. Make sure you wear a hat that protects your face, neck and ears, and a pair of UV protective sunglasses.
- Make use of shade between 11 am and 3 pm when it’s sunny.
- It is important to avoid sunburn, which is a sign of damage to your skin and increases your risk of developing a skin cancer in the future. However, even a tan is a sign of skin damage and should be avoided.
- Apply a high sun protection factor (SPF) sunscreen of at least 30. However, if you have an organ transplant, it is recommended to use SPF 50, which has both UVB and UVA protection all-year round. Look for the UVA circle logo and choose a sunscreen with 5 UVA stars as well as a high SPF, like this:

- Use this sunscreen every day to all exposed areas of skin, especially your head (including balding scalp and ears) and neck, central chest, backs of hands, forearms and legs, if exposed.
- Apply plenty of sunscreen 15-30 minutes before going out in the sun (ideally, apply it twice) and reapply every two hours when outdoors. You should especially re-apply straight after swimming and towel-drying, even if the sunscreen states it is waterproof.
- Make a habit of sunscreen application, applying sunscreen as part of your morning bathroom routine. If you have an oily complexion, you may prefer an oil-free, alcohol-based or gel sunscreen.
- 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, you should be referred to see a consultant dermatologist or a member of their team at no cost to yourself through the NHS.
- No sunscreen can offer you 100% protection. They should be used to provide additional protection from the sun, not as an alternative to clothing and shade.
- Routine sun protection is rarely necessary in the UK for people with black or dark brown skin tones. However, there are important exceptions to this. For example, sun protection is important if you have a skin condition, such as photosensitivity, vitiligo or lupus, or if you have a high risk of skin cancer, especially if you are taking immunosuppressive treatments (including organ transplant recipients) or if you are genetically pre-disposed to skin cancer. Outside of the UK in places with more extreme climates, you may need to follow our standard sun protection advice.

Vitamin D advice
People who avoid sun exposure may be at risk of low levels of vitamin D. They should think about checking their serum vitamin D levels. If the levels are low, they may consider:

- Taking vitamin D supplements of 10-25 micrograms per day. Your GP can advise on this.
- Consuming more foods rich in vitamin D. This includes oily fish, eggs, meat, butter, fortified margarine and cereals.

Having had a melanoma may impact on future applications for life or health insurance, particularly for the first five years after diagnosis. Equally you may be able to make a claim against any critical illness insurance, you may have taken out prior to the diagnosis of melanoma. If you have particular concerns about this, you should seek financial advice.

Where can I get more advice, support and 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.

Weblinks to other relevant sources resources:

British Association of Dermatologists

Skin cancer
www.skinhealthinfo.org.uk/symptoms-treatments/skin-cancer/

Information on sun protection

- Sunscreen factsheet:
www.skinhealthinfo.org.uk/sun-awareness/the-sunscreen-fact-sheet/
- Sun advice for skin of colour:
www.skinhealthinfo.org.uk/sun-awareness/sun-advice-for-skin-of-colour/
- Sun protection advice for children and babies:
www.skinhealthinfo.org.uk/sun-awareness/sun-protection-advice-for-children-and-babies/

Information on vitamin D
www.skinhealthinfo.org.uk/sun-awareness/vitamin-d-information/

Cancer Research UK (CRUK)

- *Melanoma skin cancer:* https://www.cancerresearchuk.org/about-cancer/melanoma
- *Sun, UV and cancer:* www.cancerresearchuk.org/about-cancer/causes-of-cancer/sun-uv-and-cancer

GenoMEL: The Melanoma Genetics Consortium
Information on looking after your moles and vitamin D:
genomel.org/info-for-patients/%EF%BF%BCsun-protection-and-vitamin-d-after-a-diagnosis/

Melanoma Focus

- *Sentinel Node Biopsy Guideline:* melanomafocus.org/news-blog/sentinel-node-biopsy-guideline-publication/

Macmillan Cancer Support

- *Melanoma:* www.macmillan.org.uk/Cancerinformation/Cancertypes/Melanoma/Melanoma.aspx
- *Information on flaps/grafts:* www.macmillan.org.uk/information-and-support/soft-tissue-sarcomas/treating/surgery/surgery-explained/skins-grafts.html
- *Financial support:* www.macmillan.org.uk/HowWeCanHelp/FinancialSupport/Financialguidance/Financialguidance.aspx

NHS vitamin D advice: www.nhs.uk/conditions/vitamins-and-minerals/vitamin-d/

Jargon Buster: https://www.skinhealthinfo.org.uk/support-resources/jargon-buster/

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: individual patient circumstances may differ, which might alter both the advice and course of therapy 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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