

## Introduction

Moles are small dark marks on the skin. They are caused by cells in the skin that produce pigment (colour). Moles are usually brownish, although some may be darker or skin-coloured. Moles can be flat or raised, smooth or rough, and some have hair growing from them. Moles are usually circular or oval in shape with a smooth edge.

Some moles are present at birth. These are called congenital melanonaevi. However, most moles develop during the first 20 years of life (and sometimes into the 30s and 40s). They often develop if you spend a lot of time in the sun, and tend to appear on parts of the body that catch the most sunlight, such as your face.

Moles can start to look different over time and sometimes respond to hormonal changes, such as during pregnancy, adolescence and the menopause. Some even disappear over time or fall off, often without you realising.

Seborrhoeic keratoses are moles that are common in older people who have spent a lot of time in the sun. The edge of the mole is quite faint and they're usually raised from the surface of the skin. They vary in colour from skin colour to orange and black.

Most moles are normal and harmless, but in a few cases they can develop into melanoma, a type of skin cancer. Malignant melanoma is the most serious type of skin cancer and is usually caused by short periods of strong sunlight such as on a two-week holiday.

Malignant melanoma can appear anywhere on the body. It may be a dark, fast-growing spot where there wasn't already a mole, or a mole you already have that changes size, shape or colour, and bleeds, itches or reddens. For more information on melanoma, see the health encyclopaedia topic: cancer of the skin.

## Diagnosis

It's important to check your moles regularly and be aware of any changes in colour, shape or size. Most changes are harmless and are due to a benign (non-cancerous) increase of pigment cells in the skin. However, you should see your GP if a mole looks unusual so it can be checked out.

Your GP will ask you about recent changes that have happened to the mole and when the changes started. They may also ask you about your family history to find out how likely you are to be at risk of melanoma.

If only mild changes are found, your GP will probably take a clinical photograph of the mole, which can be compared again at a later, follow-up visit. If the mole shows signs of turning malignant (cancerous) your GP may recommend cutting out a sample (biopsy) of all or part of the mole. This can usually be carried out in the surgery. The sample is then sent to a laboratory to be looked at under a microscope for signs of cell change.

If the mole is a suspected melanoma, you may be referred to a plastic surgeon or dermatologist (specialist skin doctor) for treatment. If there's one in your area, you may be sent to a pigmented lesion clinic a type of dermatology clinic that specialises in identifying suspicious moles and diagnosing malignant melanoma. You'll probably have two appointments; one for the specialist to look at the mole, and one to have it removed.

## Treatment

If the results of a biopsy show unusual cell changes in the mole, you will probably need to have it removed. If melanoma is found early on it can normally be removed with a simple surgical technique. This is because the melanoma is still thin and hasn't yet grown downwards from the skin surface or spread to other parts of the body. If melanoma isn't found early, the cancer cells can spread through the bloodstream and form tumours elsewhere.

If your doctor is concerned about a mole, you may have it removed before the results from the biopsy are back, or the whole mole may be removed for testing. If any unusual cells are found when it is analysed, you'll need to see your doctor again to re-check the treated area and look at the rest of your moles.

Moles are usually surgically removed using one of the following methods:

- Excision (cutting out the mole), sometimes with stitches, or
- Excision with cauterisation (a tool is used to burn away the mole).

Whether you have stitches or not depends on how big and deep the mole is, and how much of a scar it will leave.

Before a mole is removed, the area of skin is cleaned, and numbed with a local anaesthetic. For removal without stitches, the surgeon uses a scalpel to scrape off the mole so that its level with or slightly below the skin. An electrical tool is then used to burn the area. The wound is covered with a sterile dressing, and the surgeon or nurse will tell you how to look after it until it's healed.

Moles that need stitches after they're removed are usually large, darker and/or flat. The surgeon cuts away the mole and some of the surrounding skin, depending on the risk of cancer and if any abnormal cells could have spread. Dissolvable stitches may be put inside the wound, or the surface of the skin may be stitched and the stitches taken out later.

Moles are sometimes removed for cosmetic reasons even if they are harmless, for example if a person has a mole they think is large and unsightly and is affecting their self-esteem and confidence. You usually have to pay for this type of treatment yourself, and it's often carried out at a private clinic. Ask your GP for advice about where to get treatment.

## Prevention

Skin cancer is the most common type of cancer in this country and the number of people getting it is increasing. Figures have almost doubled since the early 1980s and there are over 69,000 new cases diagnosed in the UK every year. This is why it's so important to be aware of your skin and regularly check your moles - both old and new.

Check your moles every couple of months for any changes. Look out for the following:

- Moles that get a lot bigger (most moles are no bigger than the width of a pencil);
- Moles with uneven colouring most moles only have one or two colours, but melanomas have lots of different shades;
- Moles with an uneven or ragged edge moles are usually circular or oval with a smooth border;
- Bleeding, itching, red, inflamed or crusty moles (that haven't been picked or caught on something) that don't get better in a couple of weeks;

- The appearance of a new mole that looks irregular or unusual. Its normal to develop new moles as you get older, but you should get them checked out by your GP if the colours patchy or the edges are uneven;
- A sore, lump or blemish that doesnt have an obvious cause and lasts for more than a few weeks; and
- Patches of skin that are flaky, itchy, tender, oozing, bleeding or red that dont have an obvious cause (such as eczema).

### **Sun safety:**

The best prevention against skin cancer is to be careful in the sun and limit the amount of time you spend in the sun.

Dont be fooled into thinking youll only burn if you sunbathe travelling in a car with the windows down and playing sport outdoors all expose you to the sun. You can burn through the clouds, so its a good idea to wear sun protection lotion on your face all year round.

UV radiation from the sun (which burns your skin) is most intense in the middle of the day (between April and September), at high altitudes (such as on skiing holidays) and the closer you are to the equator. Follow these guidelines to stay safe:

- stay in the shade when the sun is at its strongest (between 11am and 3pm),
- keep babies and young children out of the sun use a high factor sun cream and dress them in loose clothing to protect their delicate skin,
- cover up with clothes, a wide-brimmed hat and sunglasses,
- use a high-factor suncream (minimum SPF15) and re-apply it regularly, particularly after swimming, and
- avoid using sunlamps or sunbeds as they give out UV rays.

## **Risks**

Most types of skin cancer are caused by exposure to the sun. However, one in ten of us have a mole thats abnormal (dysplastic nevi), and more likely to turn into a melanoma than a normal mole. Abnormal moles are usually flat, fairly large moles. They tend to have irregular borders and uneven colour, sometimes showing lots of different shades. Abnormal moles are sometimes wrongly diagnosed as melanoma because they can look very similar.

Solar keratoses, or 'sunspots', are small, red, flattish areas of scaly skin on the body that may sting if scratched. They are most common in people over the age of 40 who have spent a lot of time in the sun, and are another sign that you may be more prone to melanoma.

Your risk of melanoma is also increased if you have a lot of moles more than about 25. You should be very careful in the sun and check your moles regularly for any sign of change. This is particularly important if theres a history of melanoma in your family.

Other risk factors for melanoma include:

- Having a lot of freckles;

- Having very pale skin;
- Being female (melanoma is more common in women than men);
- Getting very sunburnt on a lot of occasions; and
- Spending a lot of time sunbathing.

## Selected links

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[Skin Cancer - Sun Smart](#) (Cancer Research UK)

[Mole removal](#) (eMedicine)

[Moles and dysplastic nevi](#) (National Cancer Institute)

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