Interdeterminate Melanocytic Lesion (large naevus, mole)

Background:

Pigmented lesions (moles) inside the eye are common and can be broadly classified into three categories depending on the thickness of these lesions. Please be aware that there is no clear distinction between the three categories.

1. Naevus or freckle: The majority of pigmented lesions are flat (0-1mm thickness) and small in diameter and do not need treatment from the ocular oncology team and are discharged back to the care of opticians for routine yearly eye checks. These naevi are common inside the eye and are found in approximately 5% of the population.

2. Indeterminate Melanocytic Lesions (IML) or large naevi: Some naevi are larger and can have thickness of up to 3 mm. These large naevi are sometimes termed indeterminate melanocytic lesions (IML) as they are in a category which falls between small naevi and frank melanoma. They need monitoring as there is a small risk of them growing into melanoma.

3. Melanoma: Pigmented lesions which are more than 3 mm thick are highly suspicious of melanoma and are usually treated; though there may be occasions when a period of observation may be appropriate.

How do we distinguish between a large naevus (that merely needs monitoring) and a melanoma that requires treatment?

When you are examined in our clinic we look for a number of things that help to decide whether your “mole” requires treatment or not. These include:

1. Size. In general thickness of the lesion is considered more important than the diameter and this is assessed with an ultrasound examination of the eye. Do not be surprised if the measurements we obtain are different from those at your referring hospital as there tends to be variation between different departments using different machines. There is no absolute cut-off between the size of a naevus and a melanoma but lesions greater than 3 mm would be considered highly suspicious of melanoma.

2. Orange pigment (Lipofuscin). This is a speckled, orange discolouration on the surface of the lesion which is more common on suspicious lesions or melanomas. It may however be difficult to distinguish from the normal tissue.

3. Sub-retinal fluid. Many moles have fluid on their surface however more extensive fluid is a suspicious feature.

4. Symptoms. Visual symptoms such as blurring or distortion of vision, shadows in the visual field or flashing lights may occur particularly in the presence of fluid.

5. Documented growth. A mole that shows demonstrable signs of growth over a short period of time would be considered to be suspicious. The fact that a mole has not been seen before does not mean that it was not present previously; it may merely have not been noticed on previous examinations. Also please note that moles may change slightly with age as a natural phenomenon.

6. The more features a lesion shows, the more likely it is to be a melanoma. Features such as drusen (white or yellow patches of "wear and tear") on the surface suggest that the mole has been present for some time and make the lesion less likely to be a melanoma.

How do we manage patients with IML?

Patients with IML are monitored closely to ensure there is no change and an initial follow up is at our unit in 3-6 months. If there is no change, 6 monthly follow up is arranged at our unit or with the referring unit. If there is no change at 5 years, the patient may be referred back to the optician for an annual assessment.

If the lesion grows, then it is treated as a melanoma.

What is the advantage of monitoring?

In the Sheffield Ocular Oncology clinic we have monitored more than 1300 patients with IML over the last 20 years. Of these, only approximately 12% (154 patients) have ultimately shown signs of growth and have then been treated as melanoma.

The Shields group from Philadelphia, USA monitored over 1300 patients of which 18% showed signs of growth over 20 years.

If we had treated all patients with IML rather than monitoring; 88% patients would have had unnecessary treatment with a risk of visual loss. This may be especially important for patients who have poor vision in the other eye. Also these patients would be regarded as having had a cancer which would affect their lifestyle as well as having financial implications such as difficulty in obtaining insurance cover.

What is the risk of monitoring?

Patient will need lifelong monitoring as there is an approximately 12% risk of the IML growing into a melanoma which will then need to be treated. Regular lifelong monitoring should ensure that any growth is noted early allowing prompt and appropriate treatment.

What is the risk of IML causing spread of disease to the rest of the body?

In our experience, we have not had any patient with an unchanged IML suffering melanoma spread to the rest of the body (metastatic disease).

The most important question is this. What is the risk of spread if my IML develops into a melanoma? In our experience, of the 154 patients with IML (out of over 1300) that eventually grew in size and were treated as melanoma; only 2% (3 out of 154) later developed metastatic disease. This means that of the 1300 patients followed over 20 years with an initial diagnosis of IML only 3 eventually developed metastases (0.2%). Interestingly, a similar study by the Shields group in Philadelphia reported 3% (35) of 1329 patients developed metastatic disease.[1]

This suggests that patients who are initially monitored as IML are not at an increased risk of dying should the lesion ultimately prove to be a melanoma.

What if I wish to be treated rather than monitored?

Lifelong monitoring of IML as an approach may not suit everybody. If you prefer to have treatment instead, please discuss your choice with one of the Specialist Sisters (link) or Consultants (link perhaps) so that this can be arranged.

What if I change my mind or need further information?

We are here to help you and are always available to discuss any queries you may have. We have the following dedicated hotline numbers for you to call and speak to either Rhona or Lesley: 01142712029/ 01142261341.

Alternatively if you prefer to email us please contact us on rhona.jacques@sth.nhs.uk, lesley.hinchliffe@sth.nhs.uk or visit www.sheffieldocularoncology.org.uk

Reference

1. Shields CL, Shields JA, Kiratli H, De Potter P, Cater JR. Risk factors for growth and metastasis of small choroidal melanocytic lesions. Ophthalmology 1995;102:1351-61.