Melanoma, mole or sebaceous wart?

KOMMENTARARTIKKEl

CLAUS LÜTZOW-HOLM

Claus Lützow-Holm (born 1956) MD PhD and specialist in skin and venereal diseases. Operates a private practice with a consultant contract.
The author has completed the ICMJE form and reports the following conflicts of interest: He has received project support from the Norwegian Medical Association's fund for quality improvement in connection with developing internet-based training.
Email: clau-lut@online.no

PETTER GJERSVIK

Petter Gjersvik (born 1952) MD PhD and specialist in skin and venereal disease and senior lecturer at the Institute of Clinical Medicine, University of Oslo.
The author has completed the ICMJE form and reports no conflicts of interest.

PER HELSING

Per Helsing (born 1958) Specialist in skin and venereal diseases and Senior Consultant with malignant melanoma as his chief research area, at the Section for Skin Diseases, Oslo University Hospital, Rikshospitalet.
The author has completed the ICMJE form and reports no conflicts of interest.

It can be difficult to distinguish between malignant melanoma, pigmented naevus and seborrheic keratosis. Curettage and punch biopsy are simple procedures that can be performed by a general practitioner to determine a diagnosis.

Diagnosing malignant melanoma can be difficult. Seborrheic keratoses («sebaceous warts») and pigmented naevi (moles) are particularly easy to confuse with malignant melanoma.

In the following we present, by means of text and video, three simple procedures that the general practitioner can perform in order to give patients a faster diagnosis and – in the case of malignant melanoma – earlier treatment and a better prognosis.

Seborrheic keratoses
Seborrhic keratoses are epidermal hyperkeratoses without malignant potential. These lesions are very common among the elderly, and are the most likely differential diagnosis when malignant melanoma is suspected in persons over the age of 40. Seborrhic keratoses develop over a period of weeks or months in middle aged persons. The lesions may vary in colour from light to dark brown (Fig. 1) and may loosen in handled or as a result of minor traumas. They leave small, temporary erosions, but may recur in the same place. Dermatoscopy shows a seborrhic keratosis to have a characteristic appearance with a verrucous surface and resembling a drop of wax (1). Such lesions are usually simple to diagnose with certainty.

**Figure 1** Photo montage of malignant melanoma, atypical pigmented naevus and seborrheic keratosis on the skin
If there is still doubt about the diagnosis, however, the lesion should be removed by curettage (Video 1). The procedure is quick, easy to perform and requires no draping or suturing. If a keratotic material is easily removed and leaves a smooth, whitish, readily bleeding surface (Video 1), the diagnosis of seborrhic keratosis is confirmed. If any doubt persists, the curettage material should be sent for histological examination.

**Atypical pigmented naevi**

Pigmented naevi with a diameter of > 5mm, irregular shape and varying colour are described in the dermatological literature as atypical or dysplastic pigmented naevi. They always have a macular (flat) component (2).

Persons with five or more atypical pigmented naevi have a five to ten times higher risk of developing cutaneous malignant melanoma than persons without them (3). These lesions are an indicator of a skin type that is prone to developing malignant melanoma, rather than a precursor to melanoma in themselves (2).

Dermatoscopy can be an aid in diagnosis, but requires both training and experience, which most GPs do not have (4). Because it may be difficult to distinguish an atypical pigmented naevus from a malignant melanoma, excisions should be performed in cases of doubt to obtain a definite diagnosis. Removal of small pigmented naevi, including atypical pigmented naevi, can be performed with the aid of a knife with a circular blade (Video 2).
The lesion should be excised with a free margin. A histological examination will determine the diagnosis. If the lesion is larger than 6 mm, an ordinary, elliptical excision should be preferred (Video 3).

Malignant melanoma

Malignant melanoma is a serious form of cancer that develops from melanocytes, normally in skin.

Early diagnosis and treatment with excision improves survival. The commonest and most important danger signals are growth and colour change, particularly the development of black areas. Special attention should be paid to pigmented lesions that differ from others in their appearance or development, often called the ugly duckling sign. The ABCDE rule (Box 1) is somewhat more complicated, and most relevant for health personnel (6, 7). The rule is based on the fact that most malignant melanomas are Asymmetrical, have an irregular Border, Colour variation with black parts, a Diameter of over 6 mm, and additionally that they have Evolving. The ABCDE rule is appropriate for identifying many cases of melanoma, but less so for nodular varieties: these have a symmetrical shape and also the poorest prognosis (8).

BOX 1

*The ABCDE rule*

There are a number of signs that may distinguish a malignant melanoma from a benign pigmented naevus. These signs can be compiled into the ABCDE rule (7)

- A: Asymmetry (two parts of the mole have different shapes)
- B: Border (uneven border on the mole)
- C: Colour (colour variation, often with black parts in the mole)
- D: Diameter (mole is over 6 mm in diameter)
- E: Evolving (the mole grows, or changes in some other way as described in the points above)

If a doctor suspects, or cannot exclude the possibility of a diagnosis of malignant melanoma, the lesion should be excised in its entirety with at least 2 mm free margin, either with a punch (Video 2) or by means of an elliptical excision (Video 3). These are procedures that all GPs be competent in. If they are not, the patient must be referred with a clear and unambiguously formulated reference to a dermatologist or surgeon, who should see the patient within two weeks at the latest (9).

Seborrheic keratoses versus malignant melanoma

Seborrheic keratoses may itch, grow rapidly and be dark coloured with black areas. They may therefore be difficult to distinguish from malignant melanoma on a clinical basis alone. The fact that a patient has several lesions with the same or almost the same appearance, is a strong indication of a diagnosis of seborrheic keratoses. Their greasy or verrucous consistency upon palpation distinguishes them from atypical pigmented naevi and malignant melanomas.
Superficial spreading malignant melanoma is the most common type of melanoma. These lesions may be macular or only slightly elevated. The surface is smooth as a rule, not greasy and seldom verrucous. A nodular malignant melanoma usually has a smooth border, but may grow fast and still be less than 6 mm in diameter. The surface is seldom verrucous.

Atypical pigmented naevi versus malignant melanoma

Atypical pigmentus naevi do not normally itch, but itching is also a relatively rare symptom with malignant melanoma. Both atypical pigmentus naevi and malignant melanoma may have an irregular shape and colour. If the lesion has been stationary for several months without signs of change, this points to a diagnosis of atypical pigmentus naevi, since a malignant melanoma usually grows radially and/or changes its pigmentation over time. The development of new black areas irregularly distributed within the lesion is particularly characteristic of malignant melanoma.

<table>
<thead>
<tr>
<th>Patient's account of developments</th>
<th>Seborrheic keratosis</th>
<th>Atypical pigmented naevus</th>
<th>Malignant melanoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &gt; 30 years</td>
<td>Age &gt; 20 years</td>
<td>Age &gt; 20 years</td>
<td></td>
</tr>
<tr>
<td>Outgrowth</td>
<td>Some similar lesions</td>
<td>Solitary, mole-like lesion</td>
<td></td>
</tr>
<tr>
<td>Rapid growth</td>
<td>Little or no change</td>
<td>that has changed in colour</td>
<td></td>
</tr>
<tr>
<td>Itching, irritation</td>
<td>No itching</td>
<td>and shape</td>
<td></td>
</tr>
<tr>
<td>Often on trunk</td>
<td>Often on trunk</td>
<td>Black component (90 %)</td>
<td></td>
</tr>
</tbody>
</table>

Table 1

The most important differential diagnostic criteria for distinguishing malignant melanoma from seborrheic keratosis and atypical pigmented naevus

Figure 2 Equipment necessary: curette, circular knife (punch) and scalpel
Seborrheic keratosis | Atypical pigmented naevus | Malignant melanoma
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**Findings**
Several similar lesions | Pigmented lesion with irregular shape, colour and size | Solitary
Greasy | Flat component | Pigmented lesion with black or heterogeneous colours that distinguish it from the others
Verrucous | Several with similar appearance | Not greasy
Homogenous | Not greasy consistence | May be black
May be black | Bits loosen |

**Differential diagnosis**
Melanoma: | Seborrheic keratosis |
Not verrucous | Pyogenic granuloma: |
More heterogeneous in colour and shape | Rapidly growing, bleeding tumour |
Never several lesions of the same type | Atypical pigmented naevus: |
Solar keratosis: | Little change, less colour variation |
Flat, dry, erythematous, seldom pigmented | Pigmented basalioma: |
| often several small, similar lesions |

**Diagnostic procedure**
Curettage, can be scraped off with slight bleeding | Punch excision if < 6 mm or ordinary boat-shaped total excision | Excision with 2 mm free margin
Histological examination in case of doubt | Histological examination | Histological examination

A malignant melanoma is normally larger than 5 mm in diameter. Patients can therefore be trained to recognise pigmented lesions that cannot be hidden behind the end of a pencil. This is called the pencil test. If such a lesion grows radially or changes shape/pigmentation, the suspicion of malignant melanoma is strengthened. We would then recommend either a clinical assessment and possibly excision, or a referral to a dermatologist/surgeon.

Dermatoscopy performed by an experienced dermatoscopist will increase the chances of being able to distinguish an atypical pigmented naevus from malignant melanoma (10).

**Discussion**

In this article we have described the most important clinical symptoms and signs that distinguish seborrheic keratoses and atypical pigmented naevi from malignant melanomas. If there is still doubt about the diagnosis following the patient’s account of developments and the clinical examination, we have presented three procedures (with video) which a general practitioner should be able to perform in order to ensure a definite diagnosis. We believe that increased use of these procedures can produce an earlier diagnosis and hence improve the prognosis in cases of malignant melanoma. At the same time, a more certain diagnosis of seborrheic keratoses and atypical pigmented naevi in general practice means a more rapid clarification for patients, and fewer referrals to the specialist health service.
The persons in the film have given their consent to publication.

LITERATURE


