Failure to diagnose: melanoma

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Case histories are based on actual medical negligence claims, however, certain facts have been omitted or changed by the author to ensure the anonymity of the parties involved.

Medical negligence claims alleging 'failure to diagnose' are a common cause of claims and complaints against general practitioners. This article outlines some risk management strategies designed to minimise the possibility of an adverse event arising from failure to diagnose melanoma.

Case history

On 9 August 2002, the 28 year old patient rang to make an appointment with her general practitioner for a 'skin check'. The receptionist said the GP, Dr Deb Browning, was fully booked but there was a 'nice, new' general practice registrar working in the practice who could see her later that day. The patient subsequently saw the registrar and told her that she wanted all of her moles checked because her uncle had recently been diagnosed with melanoma. On questioning, there was no other family history of melanoma. The patient said she thought one of the moles on her calf may have become a bit more 'noticeable' but it was hard to tell because she had a large number of moles on her trunk and legs. The patient denied any change in colour or size of any of the lesions.

The registrar performed an examination of the patient's skin, carefully reviewing the pigmented lesions with the use of a magnifying lamp. The pigmented lesion on the patient's calf had irregular margins and a uniform colour. The registrar measured the maximum diameter of the lesion and recorded its location and 5 mm width in the medical records. She recommended the patient keep a close eye on the lesion and advised her to return for review if she thought there was any change in colour or size of the mole.

Approximately 8 months later, the patient returned to see her usual GP, Dr Browning. The patient had an upper respiratory tract infection that had caused an exacerbation of her asthma. Dr Browning noted the registrar's previous entry in the medical records. She asked the patient about the mole. The patient said she thought it was unchanged. Dr Browning reviewed the pigmented lesion and noted that it now measured 9 mm in diameter. She was concerned about its appearance and thought it may be a melanoma. Dr Browning contacted a local dermatologist and organised an urgent review later that week. Dr Browning subsequently received a phone call from the dermatologist advising her that an excision biopsy had confirmed the diagnosis of melanoma. In view of the thickness of the lesion, the patient had been referred to a melanoma unit for ongoing management.

Medicolegal issues

A few months later, the patient sent a letter of complaint to the Complaints Commission about the general practice registrar. The patient alleged the registrar had failed to diagnose the melanoma on her calf during the consultation on 9 August 2002. She alleged the registrar should have sought advice from Dr Browning, rather than recommending a 'wait and see' approach. The patient further stated that Dr Browning had not adequately supervised the registrar. The Complaints Commission sent a copy of the letter of complaint to the registrar and to Dr Browning and invited them to provide a response to the issues raised by the patient. On receipt of the responses, the Complaints Commission sought an expert opinion from a GP. The expert report concluded:

'It is extremely difficult for a GP to make an accurate diagnosis of melanoma in every instance, as the accuracy rate even for a specialist can be as low as 40%. This puts an onus on GPs to rely on histopathology for diagnosis. However, in the current health environment, GPs are also under pressure to avoid 'overservicing'. If a GP was to biopsy every skin lesion, he or she could come to the attention of the Health Insurance Commission or even the Medical Board. In my view, it was reasonable for the registrar to recommend a period of close observation... In conclusion, I believe the GP registrar's management met the standards expected of a reasonable GP'.

The Complaints Commission suggested a

conciliation meeting may assist in the resolution of the patient's complaint. The patient, Dr Browning, the registrar and an independent conciliator attended the meeting. During the meeting, the patient expressed her concern that she had not been seen by a 'fully qualified' GP and, if she had been, the diagnosis of melanoma would have been made in August 2002. An explanation was provided to the patient that the registrar was part of a structured training program and had the appropriate qualifications and experience to be working without direct supervision. During the meeting, the expert report was also discussed including the difficulty in distinguishing a benign naevus from a melanoma without performing a tissue biopsy. At the conclusion of the meeting, the patient was satisfied that her concerns had been heard and confirmed that her complaint had been resolved to her satisfaction.

Discussion

Errors related to diagnosis are the most common source of error in general practice, comprising 26–78% of identified errors.[1] Studies reveal a complex mix of up to eight causes per incident, including:

- difficulties in doctor-patient communication
- poor coordination of care between health professionals
- stress in the doctor
- lack of an appropriate management plan, and
- not accepting limitations in expertise.

In this case, the registrar recommended observation of the lesion and review if there was any change. The registrar did not advise the patient to return for review within a fixed time frame and no follow up appointment or recall system was instituted. However, the management plan of 'observation and review' was appropriately documented in the medical records and the records were used as a follow up tool. In reviewing the previous entry in the medical records, Dr Browning was able to ascertain that the lesion had changed in size. Appropriate dermatological review was organised, resulting in the diagnosis of melanoma.

Risk management strategies

The NHMRC *Clinical practice guidelines: the management of cutaneous melanoma* provide useful guidance for GPs on the clinical diagnosis of melanoma.[2] According to the guidelines, the clinical evaluation of patients with suspected melanoma includes:

- history of past lesions
- family history – defined as melanoma in a direct line family member: grandparent, parent, sibling or child of the patient
- an evaluation of the lesion presented
- an examination of all the patient's pigmented lesions
- palpation of the draining lymph node fields.

Patients with melanoma will usually present with a history of change in size or colour of the lesion, a change in surface characteristics or elevation of part of the lesion. The history of change in a melanoma is usually measured in months. Alternatively, the pigmented lesion may be noted to look different from other naevi, either by the patient, or by relatives or friend – even though there is no history of change. A melanoma may arise from clear skin as well as from a pre-existing mole.

The key to the clinical diagnosis of a pigmented melanoma is irregularity of the lesion. Irregularity of colour is most important and the presence of a variety of colours in any one lesion is a key feature. Irregularity of outline is the second most common feature with indentations and outgrowths around the lesion often apparent. Irregularity of the surface is another important sign (*Table 1*).

The differential diagnosis of pigmented melanoma includes dysplastic naevus, Spitz naevus, pigmented basal cell carcinoma, blue naevus, haemangioma, pigmented seborrhoeic keratosis and some rare adnexal tumours.

Table 1. ABCDE system of diagnosis of melanoma[2]

A = ASYMMETRY
A lesion is asymmetric if opposite segments of the lesion are appreciably different

B = BORDER
The border of a melanoma is usually irregular, resembling a coastline with bays and promontories around the edge

C = COLOUR
Variation in colour is an important feature

D = DIAMETER
Superficial spreading melanomas are often greater than 6 mm when first diagnosed, but it is possible to diagnose smaller melanomas, particularly nodular lesions which can appear not only as small, shiny dark nodules but also reddish in amelanotic forms

E = ELEVATION
While E designates elevation, it is important to diagnose melanoma while it is flat or with minimal elevation. At this stage the lesion is more likely to be curable

Summary of important points

- Early detection is an important factor in melanoma management. Diagnosis is based mainly on changes in colour, diameter, elevation and border (irregularity of outline) of a skin lesion, or if the lesion is asymmetrical or different from other naevi.
- Lesions that are suspicious or cannot be diagnosed after a period of observation should be biopsied, or the patient referred for a specialist opinion (if readily available).
- Biopsy of a pigmented lesion should be done only on the basis of suspicion of melanoma. Prophylactic excision of benign naevi is not recommended.[2]

Conflict of interest: none declared.

References

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