HealthPathways Melbourne

Putting knowledge into practice

CASE STUDY 25:

Assessing suspected melanoma

Vicky, 65, presents to her GP with what she describes as a 'slowly growing brown spot' on her left mid back. She is concerned it is suspicious and wants it tested.

The GP is not very confident with skin cancer assessments, so she accesses the HealthPathways Melbourne Suspected Melanoma pathway for guidance.

She starts with a history from Vicky, using prompts from the pathway. These include matters such as past sun exposure, solarium use and any history of non-melanoma skin cancers.

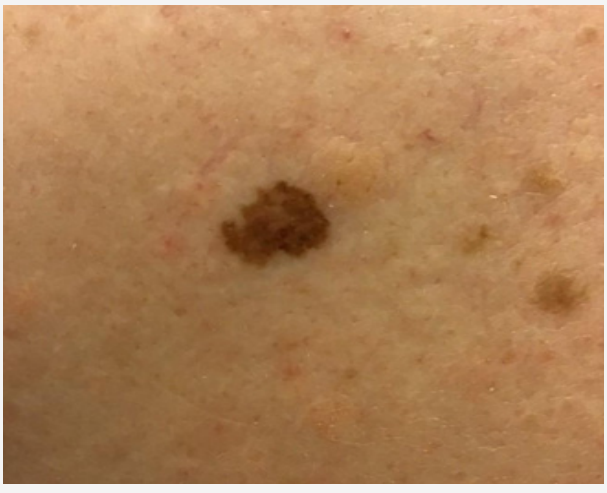

Figure 1: Patients 'slowly growing brown spot'

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CASE STUDY 25:

Assessment

1. Take a history. Ask about:
    - the presence of any patient factors that predispose to melanoma development.

Patient factors that predispose to melanoma development [2]

- High past or current sun exposure (in childhood or occupational), including sunburn, particularly blistering sunburn
- Fair skin (Fitzpatrick skin types 1 and 2)
- Red hair and blue or green eyes
- Previous melanomas especially at an early age (melanoma is uncommon under the age of 12 years but can occur)
- Multiple primary melanomas

Vicky reports the spot has been there for more than 10 years and is very slowly growing in diameter. It has not bled nor become raised.

Vicky has fair skin and blue eyes. She burns easily and tans minimally.

She was born in Cairns in far north Queensland and spent a lot of her childhood on the beach.

She has not had previous skin cancers or actinic keratoses. However, her mother had a melanoma in situ dignosed when she was 61 years old.

Vicky previously sun-baked when she was in her 20s and 30s and had many sunburns, some peeling. Also in her 20s, she had approximately 10 sessions in a solarium.

Her medical history is significant only for well controlled hypertension, for which she takes Candesartan, 8mg daily. She is not immunosuppressed and reports she has a low number of what she terms 'moles'.

The GP then moves on to the examination. She conducts a full body skin check using a dermatoscope.

2. Perform examination, preferably including dermoscopy.

Examination

- Determine the Fitzpatrick skin type. See DermNet – Fitzpatrick Skin Phototype. Be mindful that while non-melanoma skin cancers (NMSC) can occur in all skin types:
    - type 1 has the highest risk of developing a malignant melanoma.
    - types 2 and 3 also pose a high risk.
    - types 1, 2, and 3 pose the highest risk for NMSC.
- Ensure good lighting and privacy.

On examination, Vicky is type 1-2 Fitzpatrick with blonde-grey hair and blue eyes. She has a very low number of pigmented skin lesions, and minimal signs of solar damage, actinic keratosis or pigmentation.

On her left mid back there is a 11 x 8 mm brown flat patch of pigment, which stands out as an ugly duckling. It is well demarcated with an asymmetrical border. There are no other skin lesions of concern. Lymph node palpation is normal.

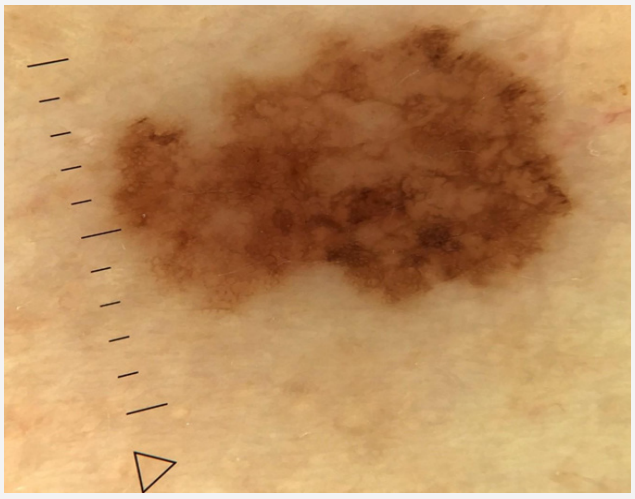

Figure 2: Patch of pigment on patient's back

The GP uses the University of Queensland's chaos and clues algorithm, which is linked on the pathway. It helps her identify the pigmented patch as a skin lesion, chaotic in colour and structure.

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There are thick branched lines forming an atypical network, an eccentric structureless area at 11 o'clock, some grey colour and a few peripheral black dots. There are also some angulated lines forming polygons, which is a good clue to melanoma in a chaotic lesion.

The GP is concerned this is a superficial spreading melanoma and feels confident to perform an excisional biopsy.

She views the 'Skin Lesion Excision' HealthPathways Melbourne pathway, which assists her to obtain informed consent, mark an ellipse around the lesion with appropriate 2 mm clearance margins, anaesthetise the skin and then perform the excision.

The pathway aids her in choosing the appropriate suture (absorbable 4-0 for deep dermal sutures and 4-0 for non-absorbable sutures) and to decide on a 14-day timeframe for their removal. Histopathology confirms a 'melanoma in situ (level 1 melanoma), 2.5mm clear of the closest radial margin. A benign intradermal naevus is also present'. There are no high-risk features.

The GP reads about 'Established Malignant Melanoma' on HealthPathways Melbourne for further guidance. It states the clearance margins for melanoma in situ.

2. Assess whether adequate surgical clearance margins have been achieved.

Clearance margins

Initial excision	
Suspected melanoma	2 mm
Re-excision	
High-grade dysplastic naevus[3]	Discuss with specialist (reporting pathologist, dermatologist, or plastic surgeon).
Melanoma in situ (MIS)	5 to 10 mm (including same amount for deep margin and/or to fascia). For lentigo maligna subtype, any MIS on the head or neck or ≥ 3 cm in

The GP is not confident doing a re-excision, so opts to arrange a dermatology referral for Vicky. She reviews the new Melanoma statewide referral criteria issued by the Victorian Department of Health.

3. Arrange plastic surgery or dermatology assessment (within 30 days) if:

- proven melanoma in situ where wider local excision is beyond the scope of the referring doctor.
- proven primary invasive melanoma < 1 mm in thickness.

Review the statewide referral criteria before referral to a plastic surgery outpatient clinic.

She calls Vicky to discuss the results, and her referral options in the public and private systems. Vicky opts for a public referral, so the GP calls the dermatology registrar at her local hospital and discusses Vicky's case.

Vicky returns to see the GP one month after the re-excision. The wound has healed well. The GP has read the 'Melanoma follow-up' pathway prior to the consult and utilises this as a framework to arrange post-melanoma follow-up care, including a schedule of full body skin checks and preventive health specific to Vicky.