An odd looking lesion

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Case study

Mark, 54 years of age, has a nontender lump on his praecordium that has been present 'for a long time'. He vaguely recalls a smaller lump at the same site years ago, which he squeezed, with subsequent resolution. Mark denies any bleeding, however, he has noticed occasional yellowish-brown stains on his shirt.

Mark is a retired bricklayer. Relevant past medical history includes myotonic dystrophy, type 2 diabetes and hypertension. Mark volunteered a family history of skin cancer but he is not sure which type. He is currently on disability allowance due to his myotonic dystrophy.

On examination, there is a 2x2 cm round solitary lesion on the praecordial skin overlying the sternum, with well defined edges, heterogeneous dark brown pigmentation, and ramification of skin strands over the curvature of the lesion (*Figure 1*). There is no contact bleeding with firm pressure or light rubbing with sterile gauze, however, some mild tenderness is present on deep palpation. There are two 1 mm papules in the vicinity that share the pigmentation of the main lesion. Mark also has a number of benign looking moles on his shoulder and back.

Question 1

What is the most likely diagnosis?

Question 2

What are the differential diagnoses?

Question 3

What is the most appropriate management?

Question 4

What is the prognosis?

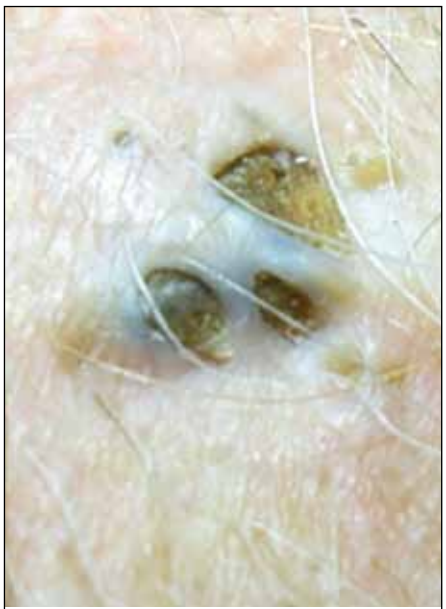

Figure 1. The praecordial lump

Answer 1

The most likely diagnosis is a sebolith. This is an uncommon consequence of a blocked pilosebaceous gland unit with partial rupture. The sebum subsequently exudes very slowly to the open surface, oxidises and air dries over a long period of time, forming crystals[1] and ultimately a stone-like concretion. In this case, Mark recalls squeezing the lesion at an earlier stage, contributing to the partial rupture of the pilosebaceous unit. The anatomical site of the lesion, the praecordium, is also known for high sebum secretion. Any deep palpation over the sternum will elicit mild tenderness and is of no diagnostic value to the lesion. The sebolith may dissolve partially on contact with water and sweat, thus explaining occasional brown staining on clothing. Finally, the two small papules are diagnosed to be early seborrhoeic keratoses, not satellite lesions.

Answer 2

The differential diagnoses includes nodular melanoma, basal cell carcinoma, seborrhoeic keratosis, and pilomatrixoma.

At first glance, the heterogeneous pigmentation and unusual morphology of the lesion, with potential satellite lesions, may suggest an ulcerated nodular melanoma, particularly as the praecordium has been sun exposed during Mark's working life. An ulcerative nodular carcinoma is more likely to be friable in skin texture, with contact bleeding which is not seen in our lesion. If there is any doubt about a possible diagnosis of melanoma, a shave, punch or excisional biopsy should be performed, or urgent referral organised.

A basal cell carcinoma is not uncommon in the sternal area, however, the lesion lacks the typical well defined ulcer base, rolled up or pearly edges, and overlying telangiectasia. Seborrhoeic keratoses usually present as well defined, stuck on, brownish-black maculopapular lesions with a warty surface and no skin stranding. Finally, multiple pilomatrixomata are associated with myotonic dystrophy,[2–3] but often present as round firm subcutaneous cysts or nodules on the face and cheeks, with well defined edges and homogenous surfaces.

Answer 3

Despite the benign nature of a sebolith, treatment with excision under local anaesthesia is appropriate in most circumstances. A simple and quick office based method, using a 16 gauge wide bored hypodermic needle, a pair of artery clips and a blunt forceps is described in *Figure 2–7*.

Answer 4

There is no known literature reporting the recurrence rate of seboliths. With removal of the sebolith, the lesion base will slowly contract and heal with excellent cosmetic results. *Figure 8* shows Mark's cosmetic result at 2 month review.

Summary

- A sebolith is an uncommon, benign skin lesion that can be removed using the quick and efficient office based procedure described.
- If unable to rule out a nodular melanoma, histological confirmation must be performed before any attempt to remove the lesion.

Figure 2. The lesion is anaesthetised by infiltrating at the base with 1% lignocaine with 1:200 000 adrenaline. Notice the blanching of the skin surrounding the lesion

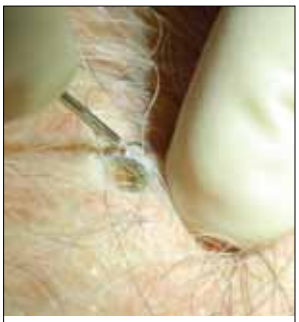

Figure 3. Using the bevel of the 16 gauge hypodermic needle, the skin strands are carefully severed and dissected. Notice the relatively bloodless state

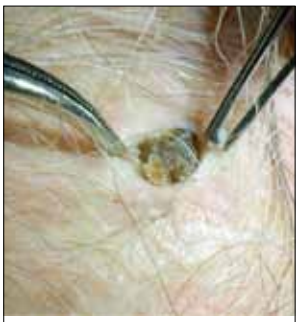

Figure 4. Using an artery clip and forceps, the skin strands are stretched to expose the sebolith

Figure 5. The sebolith is cleared at the base (in this case it is deeper than it looks) and is removed en bloc with the artery clip

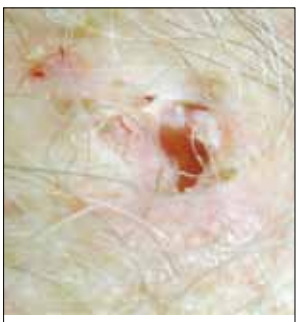

Figure 6. The lesion becomes a cavity, with excellent haemostasis. The patient is sent home with simple dressing covering the lesion. No sutures are required

Figure 7. The sebolith is shown with the forceps for scale of size. The lesion can be sent for histopathology postexcision to confirm diagnosis

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Conflict of interest: none declared.

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Figure 8. The lesion was completely resolved with an almost imperceptible scar

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