

# Puzzling Cases: Wound Sleuth



BY Rob Miller

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**T**his 65-year-old female has had a gradually enlarging ulcer develop on her leg over the last six years. Her ABPIs are normal and she is not diabetic. Despite appropriate dressings and compression therapy, there has been little improvement over the last four months.

Figure 1 shows the leg ulcer as it presented to the wound-care clinic.



## Question

At this stage which of the following would you do?

- Choose a silver foam dressing to control bacterial bioburden.
- Do bacterial, viral and fungal cultures.
- Order an X-ray of the leg to exclude osteomyelitis.
- Ask the physician to do a skin biopsy.

## Answer

(d) Ask the physician to do a skin biopsy.

The correct diagnosis determines the treatment. A chronic ulcer that does not heal despite appropriate dressing techniques should be considered suspect, and a skin biopsy should be taken. In this case, the biopsy showed a basal cell carcinoma.

A basal cell carcinoma is one of three skin cancers

that can arise from the epidermis (the top layer of the skin). Although basal cell carcinomas are more frequently seen on sun-exposed areas such as the face, they can occur virtually anywhere on the skin surface. The other two types of skin cancers that can cause ulcers on the legs are squamous cell carcinoma and malignant melanoma.

The basal cell carcinoma is the most benign of these three skin cancers. Treatment for all skin cancers is usually surgical excision. This patient was referred to plastics where the skin cancer was excised and a skin graft applied. No further problems were encountered.

## Learning points

- Always try to determine the etiology of an ulcer before embarking on therapy.
- Don't be afraid to question and change your initial diagnostic impressions so that the necessary steps can be taken to confirm your suspicions.
- Chronic ulcers may not heal for many reasons. A skin biopsy is a relatively easy means of excluding a malignant etiology. 🖐

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