Arm amputation secondary to squamous cell carcinoma: exotic expeditions leading to a delayed diagnosis?

Kevin McGarry, Michael McBride, Harry Lewis

DESCRIPTION

Despite squamous cell carcinoma being one of the most common skin cancers in the UK,\(^4\) atypical presentations can lead to delayed diagnosis and management. Here, we present a 67-year-old man who had spent a considerable period of his adult life in the Congo as a gold prospector, referred to us by the dermatology team. The man reported an insect bite that had developed into a chronic ulcer of his left forearm sometime in the early 1990s. The ulcer had been managed conservatively for over 15 years in primary care without ever completely resolving; however, over the past year, it had rapidly developed into a large fungating mass encompassing the majority of the left forearm (figure 1). The wound was discharging pus and had an offensive odour that the patient reported was requiring daily dressings in the community to manage. The patient reported that over the past year of rapid growth he had felt increasingly unwell with frequent temperatures, nausea and lack of appetite.

He underwent full serological viral screening and multiple blood cultures that were all negative. Repeated core biopsy by the dermatology team failed to produce a histological diagnosis. Chronic inflammatory cells and epithelial sinus tracts of unknown significance were reported. Microbiology reported the presence of *Pasteurella canis* that cultured from within the lesion; however, two courses of intravenous antibiotics provided no benefit.

We proceeded to excision biopsy of the whole lesion and intraoperatively discovered an infiltrative mass that was aggressively osteodestructive of the distal radius, however sparing of all soft tissues, including tendons and neurovascular bundles (figure 2). Histology of this block section revealed a massive poorly differentiated squamous cell carcinoma with bony involvement.

Following Multi-Disciplinary-Team (MDT) discussion, we proceeded to amputation of the arm at the level of the elbow to achieve clear margins. Additionally, an palpable ipsilateral cervical node was removed intraoperatively for histological processing, as we were concerned this may have been an indication of lymphatic spread. Oncology follow-up is ongoing; however, at present (6 months post amputation), there is no evidence of local or regional recurrence.

Squamous cell carcinoma in the presence of chronic inflammation is a rare but recognised phenomenon in the form of a Marjolin's ulcer. We believe this to be the first described case of a Marjolin's ulcer secondary to an insect bite.\(^2\)

**Learning points**

- For any locally destructive skin lesions not responding to topical therapies, a diagnosis of skin cancer must be excluded.
- Although core biopsy of a lesion usually is sufficient to produce a diagnosis on occasion, total excision may be required.
- A history of foreign travel or atypical infection may delay diagnosis in what otherwise would be a presumed malignant process.

---

**Figure 1** Fungating forearm lesion.

**Figure 2** Intraoperative image post excision highlighting unusual soft tissue sparing of cancer.
Images in...

MMcB also contributed to this draft and was responsible for critical revision. HL was responsible for conceiving the idea of the study and additionally gaining the images included. All authors had final approval of this version to be published and agree to be accountable for all aspects of the work, ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

1 accessed 8 Dec 17 http://www.ncin.org.uk/publications/data_briefings/non_melanoma_skin_cancer_in_england_scotland_northern_ireland_and_ireland#