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A cutaneous horn on the ear

Case study

A man, 64 years of age, retired and resident on the Spanish Mediterranean coast, without family or personal history of cutaneous tumours, requested primary medical evaluation for a lesion that had been present for a year. The lesion was located on his left ear, and had been growing progressively, without irritation, pain or other significant symptoms. No loss of weight or appetite was present.

Physical examination revealed a 2 cm exophytic mass with yellowish coloration on the top edge of the ear, with a hyperkeratotic surface and erythematous and infiltrated base. No cervical, submandibular or supraclavicular nodes were found on palpation. The remainder of the examination did not reveal any other abnormalities.

The patient was referred to a hospital dermatology department with the clinical diagnosis of cutaneous horn. Biopsy of a fragment of 0.3 cm of skin was taken. Histology was reported as squamous cell carcinoma. A chest X-ray did not reveal any abnormalities. The patient underwent surgical excision of the lesion by wedge resection of the involved helix. Histology revealed that the lesion had been fully excised with appropriate tumour free surgical margins. On follow up, no clinical relapses were detected after 2 years.



■ **Cutaneous horn (cornu cutaneum) is a relatively uncommon epidermal tumour which generally appears in sun exposed areas.¹ The term comes from the great similarity that it presents with the horns of other animal species.² Formed by compacted keratin, it can arise from a wide range of benign, premalignant or malignant underlying processes.¹ Prompt diagnosis of the underlying lesion by appropriate biopsy is vital.**

Clinical and differential diagnosis

The cutaneous horn is an excrescent lesion of conical morphology, formed by retention of the horny layer. Most have a yellow-white colour, and may be straight or curved and twisted, and vary from a few millimetres to several centimetres in length.¹ They usually appear on surfaces exposed to solar radiation, such as the face, neck, shoulders and chest. However, they may also appear in other locations such as the legs or palm of the hands.¹ Various types of

associated lesions can be found at the base of a cutaneous horn, both benign and malignant, including:

- squamous cell carcinoma (SCC)
- actinic keratosis
- keratoacanthoma
- Bowen disease
- viral warts
- seborrheic keratosis
- basal cell carcinoma, and, less frequently,
- melanoma.¹⁻³

Given the high incidence of cutaneous tumours produced by sun exposure, it is fundamental that general practitioners recognise these lesions in order to ensure rapid diagnostic and therapeutic intervention. Skin biopsy usually confirms the clinical diagnosis.¹ Biopsy, or referral to a dermatologist to rule out malignancy at the base of the horn should not be delayed when a patient with chronic sun exposure presents with a cutaneous horn.²

Management

Treatment depends on the type of lesion¹ and its malignant potential. It is essential to take a biopsy that includes the base of the horn with epidermis and dermis, giving a pathologist the best material for assessment. In cases of benign lesions, the biopsy may be both diagnostic and therapeutic, although in some cases such as large seborrheic keratoses, further treatment could be required. Any residual lesion can be treated with cryotherapy, except if the thick keratin horn is still present, due to the risk of insulating effect of the compact keratin. For malignant tumours, complete surgical excision with appropriate margins is usually required.¹ It is important to investigate the possibility of metastatic spread in cases of extensive SCC, poorly differentiated SCC or SCC affecting mucous membranes.

Conflict of interest: none declared.

References

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