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PHOTOLETTER TO THE EDITOR

Squamous cell carcinoma associated with and masquerading as molluscum contagiosum

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Abstract

Squamous cell carcinoma is a non-melanoma skin cancer with a significant risk of mortality if not diagnosed promptly. A high index of suspicion is required, since it may mimic many benign conditions. Molluscum contagiosum is an innocuous viral infection which can also mimic a wide variety of other conditions.

We report a case of squamous cell carcinoma on the anterior chest wall resembling a giant molluscum contagiosum, where the patient also had molluscum contagiosum at other sites. In addition, he developed herpes zoster of the left fifth thoracic dermatome. After surgical removal of the cancer, there was prompt subsidence of the molluscum contagiosum lesions without any specific treatment.

This report highlights the importance of early biopsy in the diagnosis of squamous cell carcinoma. As the patient had no other conditions or therapy that could account for the immunosuppression, we hypothesize that the occurrance of molluscum contagiosum and zoster along with the squamous cell carcinoma indicates possible immunosuppression due to the carcinoma, though no metastatic spread could be detected. (*J Dermatol Case Rep*. 2013; 7(3): 103-105)

Key words:

immunosuppression, skin cancer, squamous cell carcinoma, tumor, molluscum contagiosum

Squamous cell carcinoma (SCC) can present in various forms. A delayed diagnosis can have disastrous consequences. Molluscum contagiosum (MC) is a master of disguise. In children, it is usually a fairly straightforward diagnosis. In adults, it can assume many atypical forms, mainly in immunosuppressed patients, especially those suffering from AIDS. Although there have been many reports of MC mimicking various dermatoses, we present a case where the converse occurred. We describe a case of squamous cell carcinoma associated with MC, and closely resembling giant MC.

A 67-year-old, otherwise healthy man presented with a one-year history of a painful, ulcerated

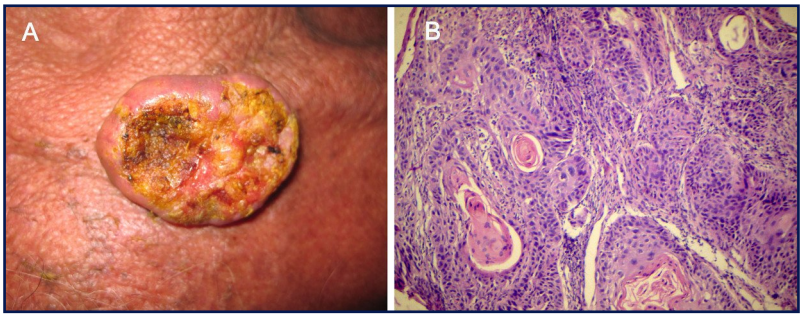

Figure 1

(A) Ulcerated tumour on the upper chest; (B) Biopsy of the tumour showing anaplastic squamous cells with incompletely keratinized horn pearls (H+E, 40x).

swelling over the front of the chest, along with a few, small, asymptomatic lesions on the right thigh and left ankle. The patient reported that the lesion on the chest had initially been a small, firm papule that appeared concomitantly, and resembled the smaller lesions. Over the course of a year, it had gradually enlarged, and ulcerated three months earlier. There was no history of trauma or pre-existing dermatosis at the site. The patient had no significant past medical history and was not on any medication.

General systemic examination revealed no abnormality. On cutaneous examination, the patient was found to have an indurated, ulcerated tumour with a rounded outline, 5 cm in diameter, on the anterior aspect of the upper chest, resembling a giant MC (Fig. 1A). There was yellow crusting in the center, with an underlying red, granular base, bleeding on touch. The surrounding skin showed evidence of solar damage in the form of wrinkling, telangiectasia, and mottled pigmentation. He had milia and comedones on the face, indicating solar damage at other sites. There were a few small, discrete, pink, dome-shaped papules with central umbilication, 3 to 4 mm in size, on the right knee (Fig. 2A) and left ankle, some showing signs of spontaneous involution, typical of mollusca contagiosa.

Laboratory data including anti-retrovirus antibody tests were all within normal limits. Direct microscopical examination of an unstained expressed core from a molluscum contagiosum lesion crushed on a slide, revealed molluscum bodies, but was negative from the nodule on the chest.

Histopathological examination of the ulcerated nodule showed a tumour consisting of epidermal masses of anaplastic squamous cells proliferating downward into the dermis. A few incompletely keratinized horn pearls were also seen (Fig. 1B). The findings were consistent with well-differentiated SCC. A biopsy from the molluscum contagiosum lesion showed epidermal cells containing large, eosinophilic, intracytoplasmic bodies, with a central crater, consistent with molluscum contagiosum (Fig. 2B).

Surgical excision of the SCC was done. Histopathological examination of the excised specimen confirmed the diagnosis of well-differentiated SCC, and all margins were free of tumour with the nearest margin clearance of 0.5 cm. Two weeks later, the patient developed herpes zoster of the left fifth thoracic dermatome, which healed rapidly with treatment. All the MC lesions involuted without treatment, and without any recurrence, within this period.

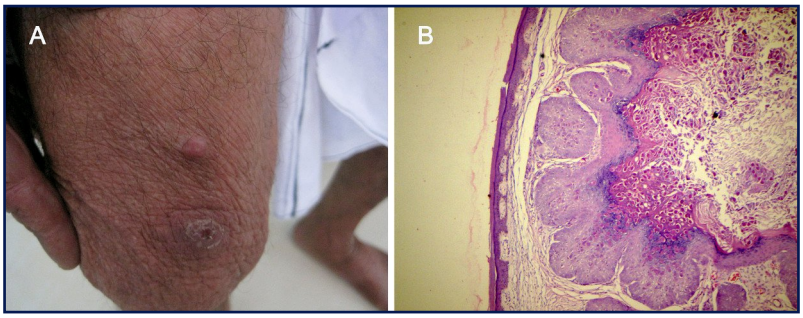

Figure 2

(A) Molluscum contagiosum lesion on the knee; (B) Histopathology of the molluscum contagiosum lesion showing molluscum bodies within the keratinocytes and a central crater (H+E, 40x).

Molluscum contagiosum mimics a large variety of cutaneous disorders. The differential diagnosis of MC includes viral tumours such as verruca vulgaris and verruca plana, deep fungal infections such as cryptococcosis, Penicillium marneffei, cutaneous histoplasmosis, coccidioiodomycosis and aspergillosis, keratoacanthoma, milia, foreign body granuloma, ecthyma, lichen planus, keratosis pilaris, granuloma pyogenicum, xanthogranuloma, eccrine poroma and sebaceous naevus, perforating disorders such as acquired reactive perforating dermatosis of renal failure, Kyrle's disease, elastosis perforans serpiginosa, perforating folliculitis, verrucous perforating collagenoma and perforating granuloma annulare. On the genitalia, MC may resemble Bowenoid papulosis, giant condyloma acuminata, vaginal syringomas and pearly penile papules. MC may be mistaken for malignancies such as SCC,[1] basal cell carcinoma (BCC)[2] and sebaceous carcinoma.[3] MC occurs in adults usually as a sexually transmitted disease (STD), and also as a significant feature of immunosuppression, particularly AIDS.[4] Molluscum contagiosum may also be a marker of immunosuppression associated with internal malignancy.

Squamous cell carcinoma frequently arises in skin which is chronically exposed to ultraviolet radiation, as seen in our patient. SCC may be mistaken for actinic keratosis, Bowen's disease, keratoacanthoma, BCC, melanoma, cutaneous horn and blastomycosis. The SCC in this patient closely resembled a giant MC, especially in the setting of MC at other sites. This case underscores the importance of biopsy of skin lesions that may be erroneously diagnosed as MC.[5] Conversely, a simple cytological evaluation of a crushed specimen alone may be sufficient to make a diagnosis of MC.[6]

In conclusion, our patient had a concurrent onset of SCC and MC, without any identifiable cause for immunosuppression, or genital lesions suggestive of STD. He also developed zoster, which may be another marker of immunosuppression. We hypothesize that despite being a purely cutaneous malignancy, SCC can cause local immunosuppression which led to the development of MC and zoster in this patient. Both these conditions healed rapidly without recurrences, following surgical removal of the cancer.

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