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An unusual collision tumour masquerading as a basal cell carcinoma on the nose

Hwee Chyen Lee[1], MBBS, *Ki Wei Tan*[1], MBBS, MRCP, *Min Wee Chia*[1], MBBS, MRCP, *Chee Seng Sim*[2], MBBS, FRCPA

ABSTRACT When two or more cutaneous tumours coexist in a single lesion, it is known as a cutaneous collision or contiguous tumour. Various combinations of collisions have been described. Collision tumours often have misleading clinical and histological presentations, and can be a diagnostic challenge. Chondroid syringomas are mixed cutaneous tumours of dual origin, and like collision tumours, are often confused with the more commonly seen cutaneous lesions. As chondroid syringomas are rare, their involvement in collision tumours is an even more peculiar occurrence. We report an unusual case of a cutaneous collision tumour on the nose involving an intradermal naevus and chondroid syringoma. To the best of our knowledge, this is the first time such a combination is reported.

Keywords: basal cell carcinoma, chondroid syringoma, collision tumour, intradermal naevus, skin tumour
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INTRODUCTION

When two or more tumours occur in one site, it is deemed a collision or contiguous tumour. Cutaneous collision tumours may mimic other cutaneous tumours, thus often resulting in misleading clinical and histopathological presentations. Chondroid syringoma (CS) is a rare mixed cutaneous tumour of dual origin. Here, we describe an unusual nodule on the nose, which was initially thought to be a basal cell carcinoma (BCC), but interestingly turned out to be a collision of two cutaneous tumours. Cutaneous collision tumours are not uncommon, but to the best of our knowledge, the combination of an intradermal naevus and CS has yet to be reported in medical literature.

CASE REPORT

A 70-year-old Malay woman with a history of diabetes mellitus and hypertension presented with a flesh-coloured, dome-shaped lump on the tip of her nose. The lesion was reported to have appeared suddenly and progressively grown in size over a period of six months. There was no pruritus, bleeding or pain. No previous trauma, fever or other systemic symptoms were reported. Examination revealed a well-circumscribed 5 mm × 9 mm nontender, pink, pearly nodule on the nose (Fig. 1a). On closer view, no telangiectasia was seen and a 3-mm circumferential area of hyperpigmentation was noted over the superior pole of the nodule (Fig. 1b). The referring physician's clinical impression was that of BCC, and an excision biopsy of the lesion was performed.

Histopathologically, the excised specimen revealed not one, but two distinct histological components. Half of the specimen was a well-circumscribed dermal lesion comprising epithelial islands and tubules admixed with myxoid and hyaline stroma, which were consistent with the features of a CS (Figs. 2a & b). Adjacent to this was an intradermal melanocytic naevus that had no junctional component and showed maturation in depth

Fig. 1 Photographs show (a) a well-circumscribed, flesh-coloured, pearly, non-tender nodule measuring 5 mm × 9 mm on the nose; and (b) a closer view of the nodule, revealing a 3-mm circumferential area of hyperpigmentation over the superior pole of the nodule. No telangiectasia is seen.

(Figs. 2c & d). The final diagnosis was that of a cutaneous mixed or collision tumour, consisting of the two abovementioned components.

DISCUSSION

This case illustrates a peculiar collision tumour of CS and intradermal naevus. Cutaneous collision tumours are not uncommon, and various combinations have been well described. The most frequently reported collision is that of BCC and naevus.[1] Less common combinations of melanomas with other tumours have also been reported. Among the latter combinations, the most common association is that of a melanoma coexisting with BCC. More unusual associations, such as a collision tumour comprising BCC and atypical fibroxanthoma,[2] have been described. A case

[1]Department of Dermatology, [2]Department of Laboratory Medicine, Changi General Hospital, Singapore
Correspondence: Dr Hwee Chyen Lee, Medical Officer, Department of Dermatology, Changi General Hospital, 2 Simei Street 3, Singapore 529889. hweech@hotmail.com

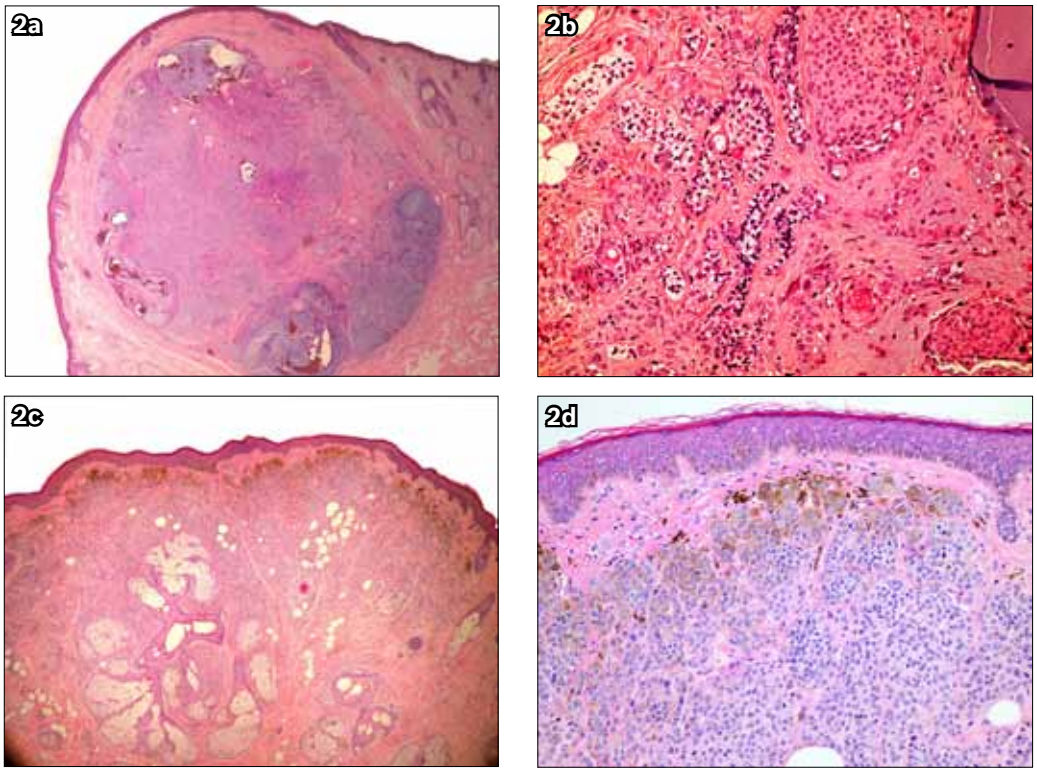

Fig. 2 Photomicrographs show (a) the complete section of the mixed tumour of the skin (Haematoxylin & eosin, × 2); (b) that the chondroid syringoma component comprises a well-circumscribed dermal lesion, which consists of epithelial islands and tubules admixed with myxoid and hyaline stroma (Haematoxylin & eosin, × 20); (c) the position of the intradermal melanocytic naevus adjacent to the chondroid syringoma (Haematoxylin & eosin, × 2); and (d) the aggregates and sheets of banal naevus cells in the dermis without junctional clustering (Haematoxylin & eosin, × 20).

of collision involving desmoplastic neurotropic melanoma and squamous cell carcinoma on the lip has also been reported.[3]

CS is a mixed skin tumour of dual origin. Usually occurring in the region of the head and neck, the incidence of CS among primary skin tumours is reported to be less than 0.01%.[4] As CS is rare, its involvement as a collision tumour presents an even more unique entity. To date, only two cases of collision tumours involving CS have been reported in the literature.[5,6] The first case described the collision of CS and desmoplastic trichoepithelioma,[5] while the second case was that of CS and eccrine spiradenoma.[6] To the best of our knowledge, this is the first reported case of collision involving CS and intradermal naevus.

Certain collisions involving histological components that share similar cell lineages have been described, thereby supporting the possibility that the two entities arise from the same pathogenic mechanism. A recent case involving the combination of desmoplastic trichoepithelioma and CS suggested that these two benign adnexal components, both with folliculosebaceous differentiation, may have originated from multipotent follicular bulge epithelial stem cells.[5] However, the presence of two distinct histological components in this case suggests otherwise. In this case, it is more likely that the coexistence of these two components was spontaneous or had occurred by chance.[1]

This is an interesting case that demonstrates the coexistence of the commonly seen intradermal naevus and the rarer CS in a single lesion, resulting in a unique cutaneous collision tumour. In summary, the possible combinations of collisions or 'two-in-one' tumours are infinite and the pathogenesis of these collisions still remains controversial. Furthermore, these collision tumours can prove to be a diagnostic challenge, as illustrated in this case. As more than one component is involved, they usually present with atypical clinical features, or they may exhibit characteristics which may mimic that of other more common cutaneous tumours. As such, the diagnosis is usually made retrospectively after a review of the histological findings. Excision biopsies are necessary to establish the diagnosis, and long-term follow up is recommended in order to monitor recurrence.

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