INTRODUCTION

Nodular hidradenoma a.k.a apocrine hidradenoma are benign tumours that arise from adnexal structures. They usually present as solitary nodules 2-3cm in diameter predominantly in females with no sites of predilection\(^1\). The malignant counterpart, hidradenocarcinoma is extremely rare and can rise de novo or by transformation of a benign lesion. We present a case of nodular hidradenoma in a young male which appeared on the site of a previous BCG scar.

CASE REPORT

A 13 year old boy presented with a painless fungating mass on the left deltoid region at the site of previous BCG vaccination. The initial lesion was a small firm nodule, thought to be a keloid and over the last 18 months had been slowly growing despite receiving an intralesional triamcinolone injection from a family doctor. He had no significant past mediial history.

Physical examination revealed a large cauliflower-like tumour with an ulcerated raw surface and a stalk, measuring 4cm x 4cm (Figure 1). The underlying BCG scar could not be appreciated. The systemic examination was unremarkable.

Our differential diagnosis included malignant adnexal tumours or soft tissue tumours and infections such as nontuberculous mycobacterial infection.

Figure 1: Ulcerated erythematous cauliflower-like lesion measuring 4cm X 4cm on the left deltoid region

An excisional biopsy was performed and histopathology examination revealed a large, well circumscribed, non-encapsulated, multilobular proliferating tumour in the dermis with an ulcerated surface and attachment to the overlying epidermis. The tumour lobules consist of basaloid cells, some of which are showing clear cell change. There are areas of large cystic spaces as well as presence of ductal structures and a rich supply of blood vessels (Figures 2 -5).

Figure 2: Well circumscribed dermal tumour composed of lobules of monotonous polygonal cells with areas of clear cell differentiation.

DISCUSSION

Hidradenomas can arise from either an eccrine differentiation known as poroid hidradenoma or an apocrine differentiation known as clear cell hidradenoma\(^2\). Both lesions have a similar clinical appearance. They are mostly asymptomatic but occasionally may have pain or bleeding.

The histological variants are based on the underlying subtype of the sweat gland. In poroid lesions, compact poroid cells with ductal differentiation is seen\(^2\). In clear cell hidradenoma, as the name suggests there is a dominance of clear cells with distinct cell border\(^2\). Of the two, the clear cell variant is more commonly encountered.

In our patient, the tumour was highly atypical with its huge size and ulcerated surface, thus making malignancy a possibility. It was important to exclude this as there is a small risk of such tumours to have malignant transformation into hidradenocarcinoma. Surprisingly, the histology showed bland cytology despite the size and rich vasculature.

In our patient, the tumour developing on the scar tissue shows a causal relationship to the history of trauma. It is well known that certain malignant tumours may arise from long standing scars or skin that has been traumatized for example in burns tissue and chronic ulcers. In the literature we encountered only one other case of a hidradenoma arising at a BCG scar site making this a rare phenomenon\(^3\). Curative treatment of this lesion is complete excisional biopsy.

REFERENCES

1. David Weedon, Weedon’s Skin Pathology 3rd Edition, pg.782, 800

**The authors declare that there is no conflict of interests**