Multifocal malignant histiocytoma

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SYNOPSIS The pathology of malignant histiocytoma has recently been defined and its malignancy confirmed beyond doubt. A unique example of this tumour is described, a search of the literature having failed to find a previously recorded case with a multifocal origin.

Clinical Features

Mrs S., aged 25, was first seen in January 1973 with a skin lesion at the upper border of the right scapula, which had been present for two years and slowly enlarging. It was uncomfortable and constantly rubbed by the straps of her underclothing. A similar smaller skin lesion overlying the left knee had been present for one year and was symptomless. Six years previously she had had a similar skin lesion excised from the right loin at another hospital but otherwise had no significant past medical history.

On examination she was a normally developed woman in good general health. There was a 2 cm scar in the skin of the right loin. Within the skin of the back, overlying the right scapula, there was an oval elevated lesion measuring 1.5×1 cm. It was of firm consistency but with a soft centre. The surface was thin, shiny, and cherry red with the appearance of impending ulceration. Although well localized, the margin blended with the surrounding skin (fig 1). The lesion at the left knee looked like a simple histiocytoma. No other lesions were noted, and there was no lymphadenopathy.

The haemoglobin was 15.0 g/dl, WBC 8600, and ESR 2 mm in the first hour. A chest radiograph was normal.

On 20 February 1973, under general anaesthesia, both lesions were widely excised with an ellipse of surrounding normal skin.

She was seen again on 6 March 1973, when, in view of the histological report on the first two specimens, a meticulous search of her whole body was made. Five further skin nodules were found in the region of the right cheek, right loin, right upper thigh, right calf, and sacrum. They were all locally

Fig 1 Preoperative photograph of skin lesion overlying the right scapula.

excised on 9 March 1973, again under general anaesthesia.

Histology

All the specimens, including that removed in 1967, were reported as having the typical appearance of

Fig 2 *Photomicrograph of lesion illustrated in figure 1. The cartwheel pattern of fibroblasts is clearly seen.*

Fig 3

Figs 3 and 4 *Enlargements of figure 2.*

Fig 4

malignant histiocytoma, the lesion overlying the right scapula being the most florid example (figs 2, 3, and 4).

Discussion

Skin tumours in which histiocytes and fibroblasts predominate are common, and the diversity of nomenclature is confusing. Kempson and Kyriakos (1972) have reviewed this field and produced a workable classification of these tumours and defined specific histological criteria on which the malignant histiocytoma may be recognized from its benign counterpart. The distinguishing histological features are of histiocytes and bizarre histiocytic giant cells within a fibrous stroma in which fibroblasts are arranged like spokes in a cartwheel radiating out from the central hub (storiform pattern). Foam cells and abnormal mitoses are frequent accompaniments. Kempson has labelled this tumour 'fibroxanthosarcoma'. The malignancy of this tumour is now beyond doubt, nine of Kempson's 22 cases had local recurrences, and three had distant metastases. Wasserman and Stuard (1974) have published full details of two patients with malignant histiocytoma who died of widespread metastases confirmed at necropsy.

The present case is unique in that multiple scattered lesions occurred over a period of six years, all with the typical histological picture of malignant histiocytoma. Multiple skin metastases may be one explanation but this seems unlikely in view of the time interval (six years) between the removal of the first lesion and the later appearance of further skin lesions and the absence of metastases elsewhere. A tumour of multifocal origin is thought more likely, representing a peculiar susceptibility on the part of the patient to this tumour. When last seen, she was free of local recurrence or metastases and no new lesions were found.

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References

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