



## Quiz

### A recurrent swelling of the scalp

A 70-year-old man presented with what appeared to be a recurrent sebaceous cyst on the scalp. He was initially seen by his general practitioner for a progressively enlarging scalp lesion of 4 months' duration. This was excised but recurred after 2 months and he was referred to us for reassessment and possible re-excision. He denied any systemic symptoms.

Local examination revealed a 3 cm nontender nodule swelling on the occipital area of the scalp (Figure 1 &

Figure 2). It was firm in consistency and not fixed to the underlying skull. Its everted margins showed pale granulation tissue.

Fine needle aspiration cytology (FNAC) of the lesion was performed (Figure 3). Routine blood tests, X-ray examination of skull and chest (Figure 4) were requested.

#### WHAT IS THE DIAGNOSIS?



Figure 1

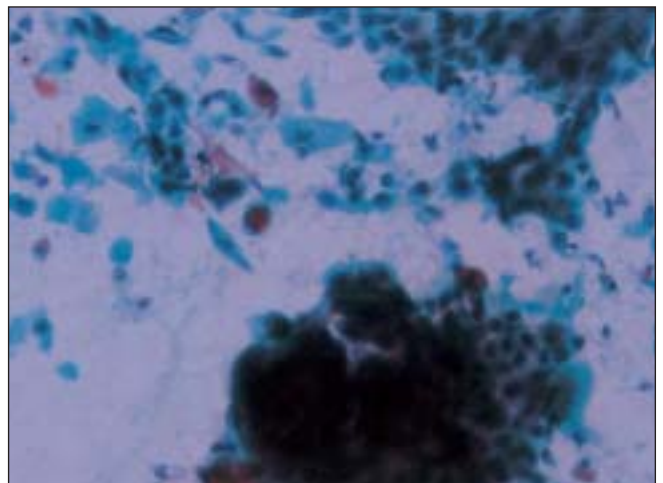


Figure 3



Figure 2



Figure 4



**ANSWER**

FNAC was suggestive of a metastatic squamous carcinoma. X-ray examination of chest revealed a mass near the left hilum of the lung, leading to a diagnosis of cutaneous metastasis from a lung primary. CT scan of the chest, bronchoscopy, and biopsy of lesions were requested. The patient refused further investigations and treatment. The patient died 4 months later. The interesting feature in the present case was the isolated involvement of the scalp as the initial manifestation of the disease.

**DISCUSSION**

The incidence of cutaneous metastases from lung cancer varies from 2.8 – 7.5%.<sup>1</sup> The scalp represents 4% of all cutaneous metastases.<sup>2</sup> The lesions are often mistaken as a variety of benign conditions in the absence of any uniform or pathognomonic feature.<sup>3</sup>

In males, the primary tumor is usually in the lung, colon, stomach or kidney. Metastases appear early in the course of the disease.<sup>2</sup> In women, breast and lung cancer are the commonest causes of cutaneous metastases. Although many patients develop skin lesions during the course of known malignancy, they may be the presenting manifestation of the primary disease as seen in our patient.<sup>1</sup>

The scalp is a common site for metastases, most likely due to its rich vascularity. Clinically, scalp metastasis may present as solitary or multiple nodules, erythematous papule or a bulging mass. A solitary nodule is the most frequent presentation.<sup>3</sup> Alopecia neoplastica is a well recognized but rare condition where there are single or multiple areas of cicatricial alopecia. It is usually a manifestation of breast cancer but also reported with gastric cancer and placental trophoblastic tumor.<sup>2</sup>

A good history and fine needle aspiration (FNA)

cytology or biopsy of the lesion is necessary to establish the diagnosis.<sup>4</sup> Spitz DJ et al demonstrated that FNA could provide rapid and accurate diagnosis in evaluation of scalp masses.<sup>5</sup> Carson HJ et al reviewed histological and FNA biopsy findings of scalp lesions and concluded that FNA was particularly effective in the diagnosis of rapidly growing malignant lesions.<sup>6</sup>

The occurrence of scalp lesions in lung cancer indicates an ominous prognosis.<sup>1</sup> Half of the patients with cutaneous metastasis die within the first six months after the diagnosis.<sup>4,7</sup> The outcome of patients with cutaneous metastasis of lung carcinoma is worse than those with other cancers.<sup>7</sup> The response to chemotherapy is poor.<sup>1</sup> Palliative radiotherapy can relieve distressing symptoms and improve the quality of life.<sup>4</sup>

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