A case of necrolytic migratory erythema associated with non-Hodgkin's lymphoma

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Abstract

Necrolytic migratory erythema (NME) is characterized by an irregular annular eruption with erosions and crusting. It is usually associated with glucagonoma syndrome.

We report a case of necrolytic migratory erythaema in association with a non-Hodgkin's lymphoma.

Introduction

Necrolytic migratory erythema is characterized by an irregular annular eruption with serpiginous advancing borders, erosions and crusting, resulting in a scalded appearance. It is usually associated with glucagonoma syndrome, and has rarely been associated with intestinal malabsorption disorders, cirrhosis and nonpancreatic solid malignancies[1].

Resection of the malignant tumour may produce a dramatic remission of skin lesions[2].

Case history

A 56 year old lady presented to a surgical ward with abdominal pain, backache and intermittent fever for 2 months duration.

On examination she was emaciated and febrile, with severe pallor. There was no peripheral lymphadenopathy. Examination of the skin revealed erythematous macules over the buttocks, which had superficial stellate ulcerations with necrosis and overlying crusts (Figure 1). Clinically it was suggestive of (NME) or zinc deficiency. There was angular chelitis but no changes over the tongue. She had nontender hepatosplenomegaly with no other palpable masses in the abdomen.

Laboratory investigations were as follows: haemoglobin – 6.2g/l, leucopenia – 3400/mm^3 and a differential count of 54.5% neutrophils, 36.2% of lymphocytes. Platelet count was 195 x 10^3/mm^3. Blood picture showed normocytic normochromic red cells with marked anisocytosis, some macrocytosis and moderate polychromasia. Erythrocyte sedimentation rate was 43 mm.

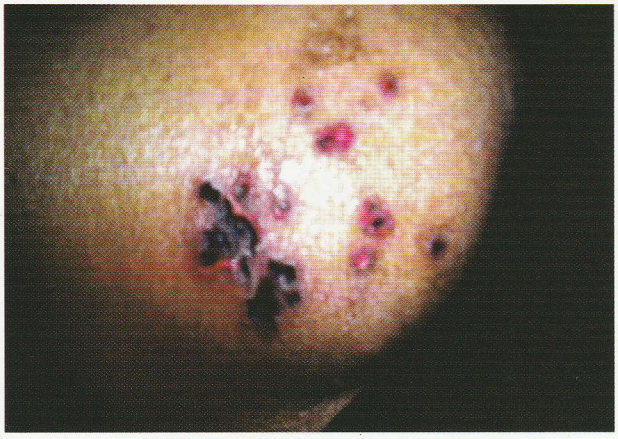

Figure 1. *Necrolytic lesions over the buttocks.*

Her fasting blood sugar was normal (6.2 mmol/L) with a normal Glucogen level (50pg/ml). Serum amylase level was 332 u/L.

CT scan of the abdomen showed an infiltrating lesion of the spleen suggestive of a lymphoma. Upper GI endoscopy and colonoscopy did not reveal any abnormality.

Histopathology report of the skin biopsy from the buttock showed a complete necrosis of the upper epidermis, with upper dermal changes of acute and chronic inflammation mainly around blood vessels with fibrinoid necrosis and extravasated red cells. The findings were suggestive of necrolytic migratory erythaema (Figure 2).

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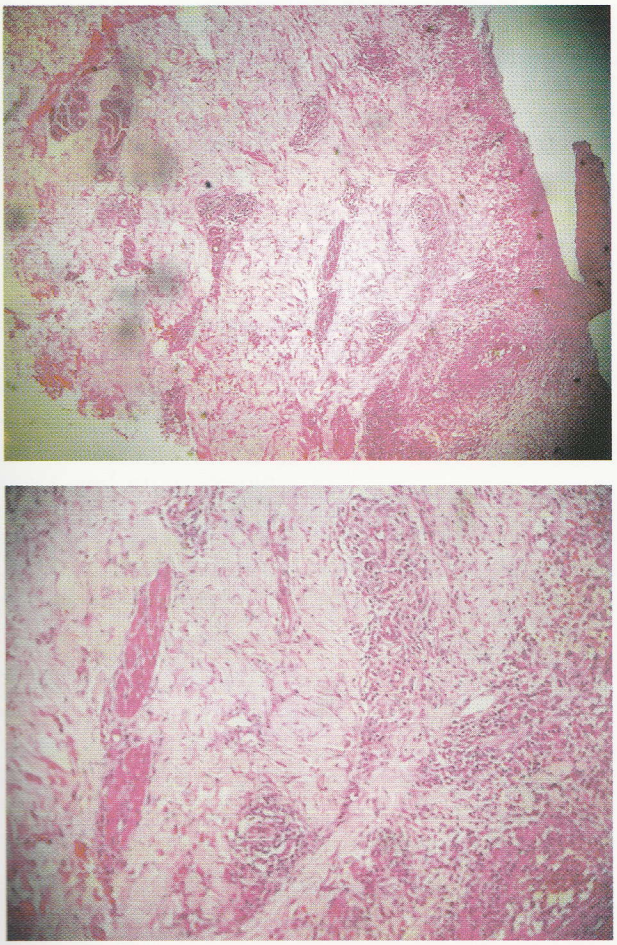

Figure 2. *Histology of the lesions of the buttocks.*

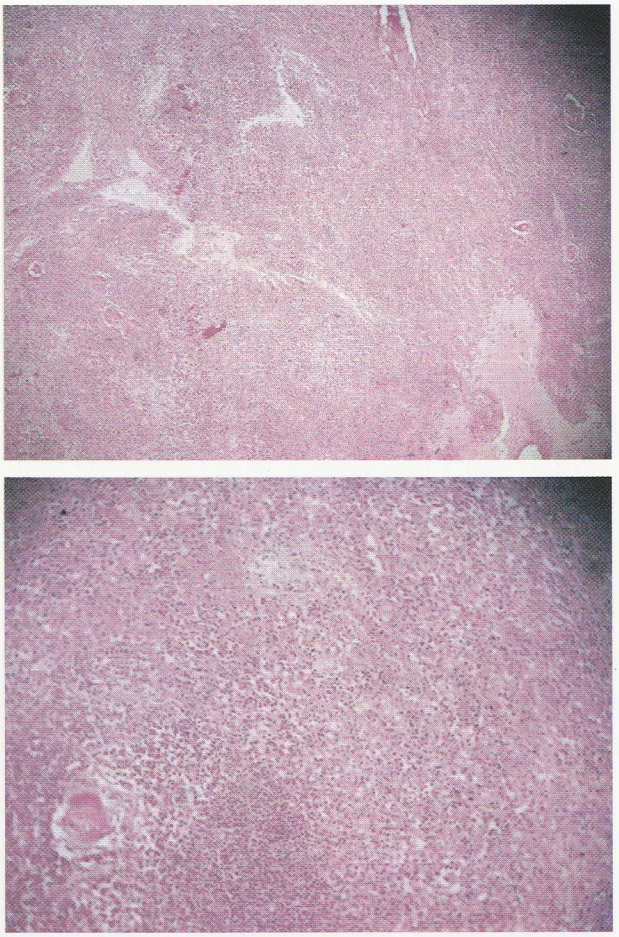

Figure 3. *Histology of the spleen.*

The patient underwent an exploratory laparotomy. There was an enlarged liver containing yellowish areas along with enlarged gall bladder and spleen showing multiple whitish deposits clinically suggestive of lymphoma. Subsequently a splenectomy was performed.

Histology of spleen revealed changes of non-Hodgkin's lymphoma (Figure 3).

It was diagnosed as non-Hodgkin's lymphoma with diffuse large cell type suggestive of T cell origin.

The skin lesions disappeared after splenectomy and she clinically improved.

Later she presented with a fatal cerebro-vascular accident and autopsy findings revealed brain deposits of non-Hodgkin's lymphoma.

Discussion

NME is a rare dermatosis that is usually associated with an underlying pancreatic islet cell tumor. The skin eruption may be the first manifestation of the disease, and its recognition may lead to the diagnosis. The lesions consist of erythematous, scaly and crusted patches most frequently observed in areas prone to trauma, such as the groin, intergluteal, and genital areas. Cheilitis and glossitis are very common mucosal manifestations[1]. The pathogenesis of the skin eruption is not known[3]. It is a clinical diagnosis, which can be confirmed by suggestive histological findings. Vacuolated, pale, swollen epidermal cells and necrosis of the superficial epidermis are the characteristic histopathological features[3].

Non-Hodgkin's lymphoma has a variety of cutaneous manifestations. Here we report the first case of NME associated with non-Hodgkin's lymphoma. Our patient had typical NME, with characteristic histological features, and as NME resolved after resection of the tumour, it is unlikely to be an incidental finding. As early diagnosis of non-Hodgkin's lymphoma is essential, recognition of the skin manifestations may be vital for the survival of the patient.

References

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