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Burkitt's Lymphoma of the Testes and Skin in an 18-month old Child

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Summary

Duvie SOA. Burkitt's Lymphoma of the Testes and Skin in an 18-month old child. *Nigerian Journal of Paediatrics* **1983; 10: 85.** A case of left testicular Burkitt's lymphoma with subsequent involvement of the right testis and skin in an 18-month old child is presented. The unusual age and mode of presentation suggest the need to include this entity in the differential diagnosis of testicular swelling or obscure cutaneous lesion in the paediatric age group. The dramatic response to chemotherapy and the absence of clinical evidence of recurrence after five years is emphasized.

Introduction

BURKITT's lymphoma has a peak age distribution in the 3–9 years age group and its rarity in children under 2 years of age has been reported by several authors.[1-4] The rarity of testicular and/or cutaneous lesions as a primary manifestation of the lymphoma has also been well documented.[1-6] Lamm and Kaplan[6] have however, reported a case involving the left orbit and testis in a 9-month old child who died 3 months after the onset of the disease with poor response to chemotherapy. The rarity of testicular and cutaneous manifestations, the unusual age of presentation and the good response to chemotherapy in a child we have recently encountered have prompted this communication.

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Case Report

OO, a 1½-year old male Nigerian child was born at the Wesley Guild Hospital, Ilesha. He was the product of a full-term, normal vaginal delivery. The neonatal history was uneventful. He was the third child of the parents. Six months prior to admission, he had a transient attack of mild fever, generalized body itching and rashes. He was treated at home with antipyretics. Following recovery, the parents noticed an increasing left scrotal swelling. Examination revealed a diffusely enlarged, firm but not tender testes, measuring 4½ by 2 by 2 cm (Fig IA). The cord was not thickened, the left scrotal skin was normal and there were no signs of hydrocele. The haematological, biochemical and radiological investigations were normal. A left orchidectomy with high excision of the spermatic cord was

performed. The excised left testis was extensively involved by a whitish-yellow and lobular tumour (Fig IB). Histology showed marked infiltration of the testis by uniformly immature lymphocytes with occasional histiocytes containing cellular debris (Fig IC). On the basis of these findings, a diagnosis of Burkitt's lymphoma was made. The mother refused chemotherapy and the patient was discharged against medical advice.

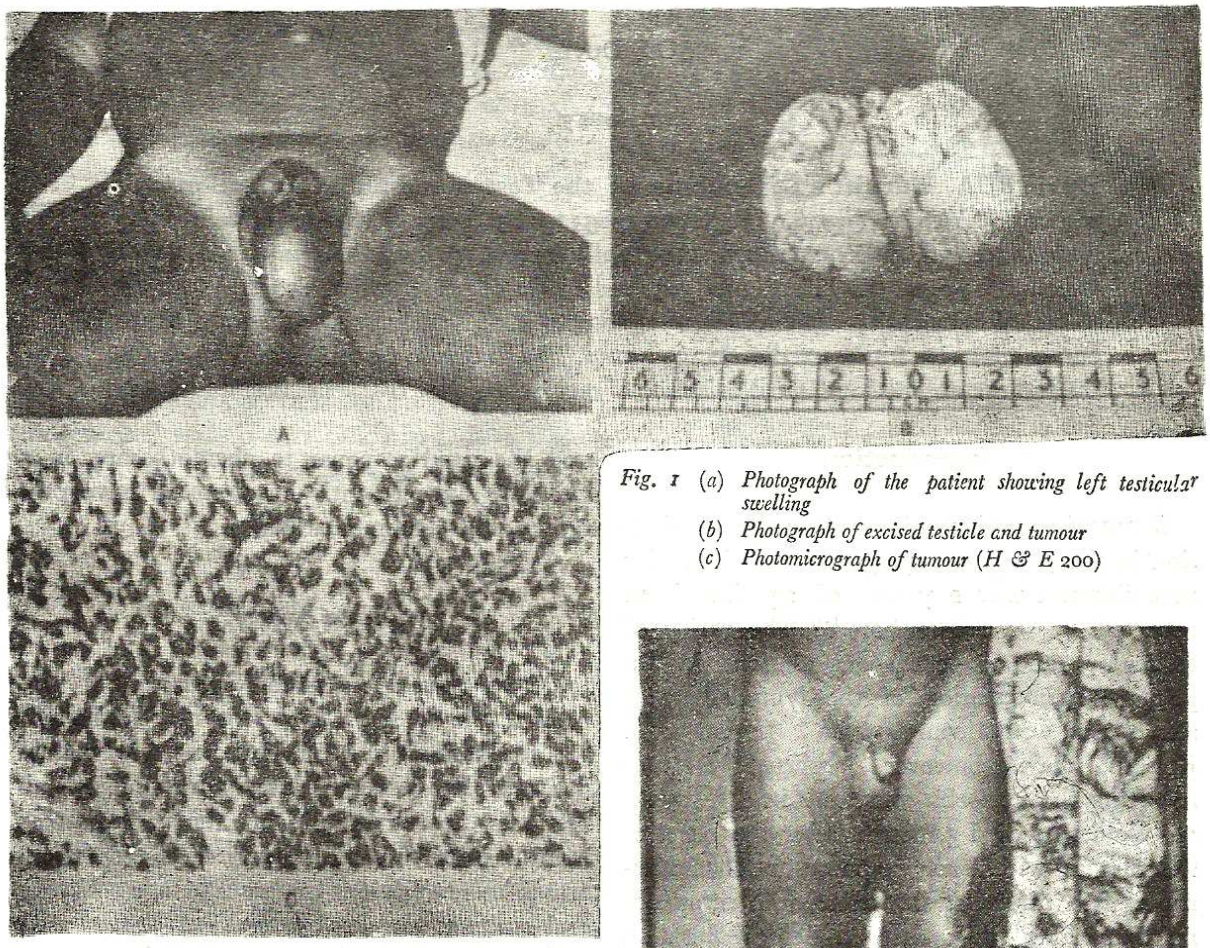

Fig. 1 (*a*) *Photograph of the patient showing left testicular swelling*
(*b*) *Photograph of excised testicle and tumour*
(*c*) *Photomicrograph of tumour* (*H & E* 200)

Fig. 2 *Photograph of same patient at age, 2 years 3 months, showing right testicular swelling*

Nine months later, the patient, now aged two years and 3 months, was again seen at the out-patient clinic with a 2-week history of right testicular swelling and six months history of chronic indolent ulcer on the left thigh. The main physical findings were a healed scar from the left orchidectomy incision and a right testicular swelling measuring 2.5 by 3 by 2 cm (Fig 2). The right scrotal skin and right spermatic cord were normal. A hemispherical swelling, 5 cm in diameter, surmounted by two ulcers, was noted on the anterior aspect of the lower third of the left thigh just above the knee (Fig 3A). The swelling was not attached to the underlying structures. A culture from the ulcer yielded *Pseudomonas aeruginosa*, sensitive to gentamycin and colistin

Laboratory and radiological investigations were normal. An excision biopsy of the skin lesion was performed. The histological findings confirmed the diagnosis of malignant lymphoma cutis (Fig 3B).

The child was treated with cyclophosphamide, 35 mg/kg body weight, intravenously followed 2 weeks later, by oral methotrexate, 1 mg/kg body weight daily, for 8 days. The drugs were very well tolerated and the response was dramatic with complete regression of the right testis to it's normal size. The patient has been followed up for 5 years with no clinical evidence of a recurrence of the disease.

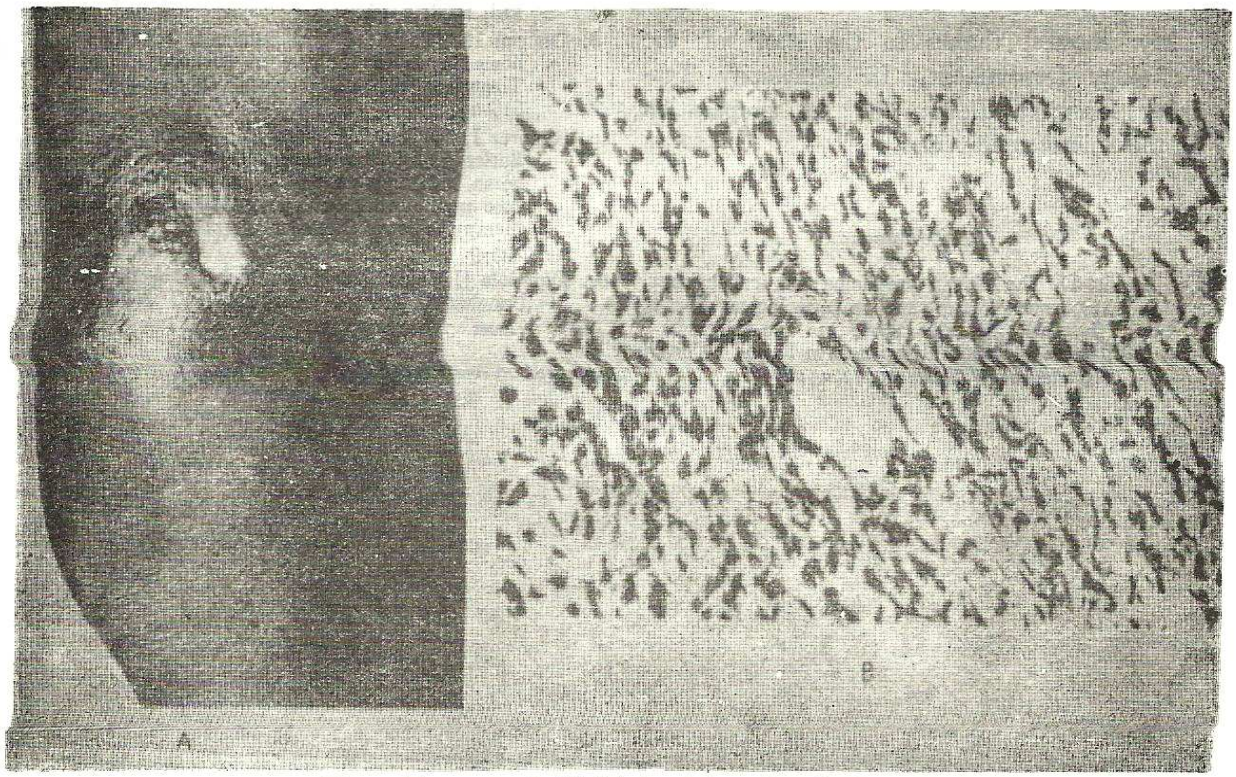

Fig. 3 (*a*) *Photograph of the left leg of the patient showing an ulcerated skin lesion just above the knee*
(*b*) *Photomicrograph of the skin lesion* (*H & E x* 200)

Discussion

Burkitt's lymphoma is essentially, a multifocal sarcoma which may occasionally present as a single clinical lesion.[1 4-7] Our patient would seem to conform to this pattern. However, the probability of metastatic spread cannot be completely ruled out as the initial examination on first admission did not reveal clinical evidence of right testicular or cutaneous involvement. Several workers [3 6 7] have reported that testicular lesions in Burkitt's lymphoma are occasionally, bilateral.

The satisfactory response of Burkitt's lymphoma to cyclophosphamide or/and methotrexate has been well documented.[7-9] The present case received both drugs and had complete remission which has been sustained for five years. This was in contrast to the poor response reported by Lamm and Kaplan[6]. Durodola[10] has recommended a combination of drug therapy in the management of the condition.

The unusual age and mode of presentation of the present case would suggest the need to include the lymphoma in the differential diagnosis of a testicular swelling or obscure cutaneous lesions in the paediatric age group.

Acknowledgement

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