An unusual presentation of Burkitt's lymphoma

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Introduction

Since the publication in 1958 by Dennis Burkitt "A sarcoma involving the jaws in African Children" ¹, Burkitt's lymphoma has been recognised as distinct entity ². It is considered to be a very interesting tumour, because it is, with a doubling time of 24 hours, the fastest growing human tumour. Its geographical spread is within that part of Africa where the mean annual temperature is above 15°C and the annual rainfall is more than 50 cm; this overlaps the areas of endemic malaria, and it is therefore thought that malaria during the first years of life causes immunodepression, which enables Burkitt's lymphoma to develop ³. Finally, the response to chemotherapy can be dramatic ⁴.

Usually it occurs in children between 4 and 8 years old. They present with a swelling in the face and/or the abdomen. The use of ultrasound has improved the accuracy of staging and the diagnosis is confirmed by fine needle aspiration biopsy.

Chemotherapy is the treatment of choice either as monotreatment with cyclophosphamide or as multidrug treatment with a combination of cyclophosphamide, methotrexate and vincristine. It has not yet been proven which of the treatment modalities is best, although there is some evidence, that prolonged multidrug therapy reduces the relapse rate ⁵.

Case Report

In December 1990, a 9 year old girl was referred to our hospital with a history of dysuria and nocturnal enuresis for one month. The mother had noticed a swelling in the lower abdomen. On physical examination a firm non-tender suprapubic mass extending up to the umbilicus was felt. The spleen and liver were not enlarged. Ultrasound revealed bilateral hydronephrosis and an enlarged irregular bladder.

An examination under anaesthesia and cystoscopy with biopsy showed normal bladder mucosa and schistosomiasis. However despite treatment with praziquantel the tumour did not decrease.

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Correspondence to: Dr. EJ van Hasselt Queen Elizabeth Central Hospital P.O. Box 95 Blantyre After some delay an exploratory laparotomy was performed which showed a large tumour of the posterior wall of the bladder. No other abnormalities were found. Biopsies were taken and histology showed Burkitt's lymphoma.

After an episode of severe gastroenteritis, treatment with cyclophosphamide and methotrexate was started. Three doses with an interval of one week each were given. Following this treatment the swelling was no longer palpable or visible with ultrasound. Unfortunately the patient did not return for follow up treatment.

Discussion

Burkitt's lymphoma is the most common childhood malignancy in Malawi ^{6,7}. In the period 1985 to 1989, there were 233 histologically proven Burkitt's lymphomas out of a total of 508 malignancies in children (based on biopsy specimens submitted to Queen Elizabeth Central Hospital Histology Department). In the same period 79 patients received chemotherapy for Burkitt's lymphoma at Queen Elizabeth Central Hospital.

In 50% of these 79 patients the presentation of the tumour was in the abdomen with or without facial involvement, and in 48% the presentation was in the face alone.

Our patient is to our knowledge the first patient with a Burkitt's lymphoma of the bladder in the Southern Region of Malawi. In the available literature no mention is made of the bladder as a possible location of this tumour. We therefore considered it interesting to present this case and we would like to emphasize that a fast growing tumour in the bladder region needs an urgent evaluation to rule out a Burkitt's lymphoma.

References

- Burkitt DPA. Sarcoma involving the jaws in African children. Br J Surg 1958;46:218-223.
- Burkitt DP. The discovery of Burkitt's lymphoma. Cancer 1983:1777-1786.
- Hutt MSR, Burkitt DP. The geography of non-infectious diseases. Oxford Medical Publications, 1986.
- Ziegler JL. Burkitt's lymphoma. New Engl J Med 1981;305:735-745
- Lemerle J. Malignant B-cell lymphoma of childhood. In: Voute PA et al, Cancer in children. Berlin: Springer Verlag, 1986:137-151.
- Van Hasselt EJ. Malignancies in childhood in Malawi. (In press)
- Molyneux EM. Childhood malignancies in Malawi 1967-1976. East Afr Med J 1979;56:15-21.