EDITORIAL

BURKITT S LYMPHOMA OF THE BREAST AND OVARY, CASE REPORT

Ahmed M. Elhaj[1], MBBS, Fc Rad Onc (SA), MMED Rad Onc (SA) A. A. Mohamadani[2]FRCPath & Kanan. Sanhouri[2], MBBS, DPH.

1 -Institute of Nuclear Medicine, Molecular Biology & Oncology, University of Gezira, 2 - Department of Pathology, University of Gezira, Sudan.

ABSTRACT

A 17 year old Sudanese female with breast lump and ovarian mass proved to be Burkitt s lymphoma of the breast and ovary. She received 8 cycles of CHOP chemotherapy and Intrathecal methotrexate and achieved complete response. Three years after treatment she is well without recurrence. A lymphoma should always be considered in the differential diagnosis of a breast tumor, especially in very young patients. It needs a different work-up and treatment.

INTRODUCTION

Lymphoma frequently involves different extra-nodal systems, such as lung, gastrointestinal tract, liver, kidney, bones and skin. Primary lymphoma of the breast is an unusual clinical entity [(1)]. It accounts for only 0.04 0.53% of all malignant breast tumors and less than 1% of all non-Hodgkin s lymphomas [(2)]. Lymphoma or leukemia usually involves the breasts secondarily to a diffuse, multicentric or disseminated process. Primary (localized) non-Hodgkin's lymphoma (NHL) of the ovary is also rare [(3)]. Burkitt s lymphoma is a very rare type of lymphoma with a predilection for the ovary [(4)].

CASE REPORT

A 17 years old Sudanese female was referred to our hospital in December 2002, with a history of many years of abdominal swelling which was diagnosed and managed as tropical splenomegaly. 4 months prior to her presentation a pelviabdominal mass and increasing left breast swelling were reported. No breast symptoms were present. FNAC of the breast swelling revealed Burkitt s lymphoma. The patient underwent laparotomy with the excision of the pelviabdominal mass and a biopsy from left breast. Histopathology of both specimens revealed Burkitt s lymphoma (ovary and breast). All other tests including blood and chest radiograph were within normal limits. Physical examination revealed diffuse left breast swelling measuring 20X15 cm, firm and almost occupying the whole breast. There were hepatomegaly of 4 cm and splenomegaly of 10 cm. The patient received CHOP (Cyclophosphamide, Adriamycin, Vincristine, and Prednisone) chemotherapy for 8 cycles and Intrathecal methotrexate injection for 6 cycles. The patient responded very well to her treatment with disappearance of all clinical findings except splenomegaly which remained at the same size prior to

EDITORIAL

treatment. The patient attended her last follow up, three years after initial presentation, when no recurrence or progression of disease was reported.

DISCUSSION

Burkitt s lymphoma (BL) is a rare form of cancer predominantly affecting young children in Central Africa, but the disease has also been reported in other areas. The form seen in Africa seems to be associated with Epstein–Barr virus infection, although the pathogenic mechanism is unclear. It involves the face, particularly the jaw and maxilla, producing facial disfigurement, the abdomen, especially ovaries and kidneys, and the retroperitoneal region. Lymphadenopathy is not a feature. The age of onset is earlier than the non-African variety, being about 7 years, with a range from 2-16 years with a peak at 6 years and a male preponderance. Non-African Burkitt's lymphoma shows a predilection for the gastrointestinal tract. Most patients with abdominal BL present with multiple

tumors involving many organs including the ovaries. Unilateral ovarian involvement is rare in BL cases. Primary (localized) ovarian BLs are usually bilateral and are usually associated with ascites. BL is a rapidly growing tumor and patients usually have high serum LDH levels. With aggressive chemotherapy regimens BL is a potentially curable malignancy. Patients with localized disease have a cure rate of approximately 90% but the cure rate drops to 30% in disseminated disease. Due to propensity of BL to metastasize to the CNS, prophylactic intrathecal methotrexate is a requirement [5, 6]. In this particular case we are presenting, It was difficult to decide whether the BL started in the ovary and then involved the breast or vice versa. It is unlikely that both lesions started simultaneously as two independent primaries. There was no evidence of bone marrow or any other site involvement.

Fig 1: Patient at presentation.

Fig 2: Patient after chemotherapy treatment.

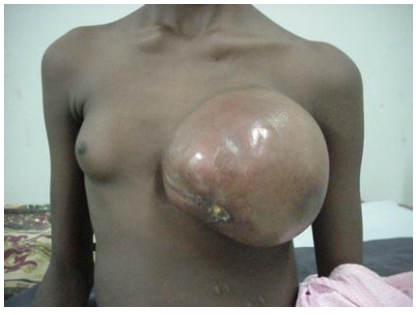

Fig 1

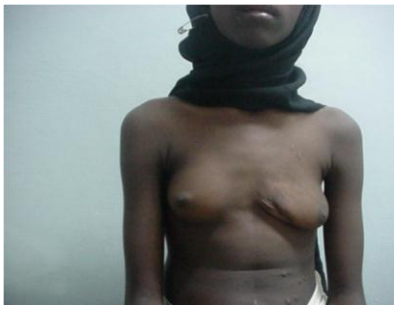

Fig 2

REFERENCES

EDITORIAL

1- Frei KA et al,. Primary breast lymphoma, contralateral breast cancer, and bilateral Brenner tumors of the ovary. Obstet Gynecol. 2002 Nov; 100(5 Pt 2):1079-82.

2- Toshio Imai and Tomo yuki shiga, .Primary Non-Hodgkin s malignant lymphoma of the breast: long term follow up. The Breast volume 13 issue 2, April 2004, Pages 152-154

3- Vang R et al. Ovarian non-Hodgkin's lymphoma: a clinicopathologic study of eight primary cases. Mod Pathol. 2001 Nov; 14(11):1093-9.

4- Mielcarek P et al. Burkitt lymphoma involving the ovaries. Ginekol Pol. 2003 Jul; 74(7):553-6.

5- Baloglu et al. 24-year-old female with amenorrhea: bilateral primary ovarian Burkitt s lymphoma. Gynaecologic oncology, Volume 91, issue 2, November 2003, Pages 449-451.

6- George J N and Williams ME .American society of haematology, self assessment program. 1st edition, 2003, Blackwell publishing, pages 215216.