
Bilateral large ovarian lymphoma presenting by abdominal enlargement (Case Report)

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Abstract

Introduction: Primary lymphomas in the ovary are rare, and it represents less than 0.5% of primary ovarian tumors.

Case: A 22-year-old unmarried woman presented with progressive abdominal enlargement. MRI revealed bilateral suspicious adnexal masses managed by laparotomy. Histo-pathological examination revealed Bilateral Burkitt lymphoma. **Conclusion:** Ovarian lymphoma should be considered in the differential diagnosis of malignant ovarian masses regardless of the age of the patient.

Keywords: Bilateral ovarian lymphoma; Burkitt lymphoma; primary ovarian lymphoma.

Introduction

Primary ovarian lymphomas are one of the rare ovarian tumors which represent less than 0.5% of primary ovarian tumors [1]. Burkitt lymphoma (BL) is a type of malignant non-Hodgkin lymphoma associated with a translocation in c-MYC gene, in addition to, heavy locus immunoglobulin (which is known as IGH, it is a region on human chromosome 14 that contains a gene for the heavy chains of human antibodies or immunoglobulins), which result in the commonest variant, which is translocation t(8; 14) (q24; q32). Burkitt's lymphoma is rare in adults when compared to diffuse large B-Cell lymphoma or low-grade B-cell lymphomas [2].

The aim of the current case study is to present a rare bilateral large ovarian lymphoma in a young adult woman.

Case

A 22 years old unmarried woman presented with abdominal discomfort and progressive abdominal enlargement. By the Abdominal examination a palpable mobile pelviabdominal mass was recognized. Then office transabdominal ultrasonography showed bilateral adnexal masses. Magnetic resonance imaging (MRI) was done which showed Bilateral solid adnexal masses (the

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left adnexa 9X9.6X13.2 cm with marked diffusion restriction and internal cystic areas, while the right adnexa showed the same features but smaller in size 3.9X7.1X7.7cm), in the context of oncology workup process, tumor markers were requested (CEA, CA 19.9, CA-125, alpha feto-protein and BhCG) which were all normal except for slightly elevated CA-125.

The above collected information and evidence starting from clinical examination, imaging and lab results contributed to take the decision of exploration. The patient was informed in detail and was consented for the exploration. Exploration of the abdomen was done through a mid-line incision, which showed bilateral solid adnexal masses (video), multiple lesions in the small intestine (which wasn't detected by MRI) and some ascetic fluid. Left salpingo-oophorectomy and right ovarian biopsy was done, biopsy of small intestine lesions, in addition to, omental biopsy and cytology from the ascitic fluid were done. The patient had an uneventful recovery. Pathology revealed Burkitt's lymphoma in all tissue biopsies and ascetic fluid and the patient was referred for chemotherapy.

Discussion

Burkitt's lymphoma is defined as a type of non-Hodgkin lymphoma mainly targeting the humoral immune cells (B cells) [3]. Ovarian lymphoma may be an aggressive type of primary ovarian lesion or a secondary metastatic lesion [4].

There are very few cases of bilateral ovarian lymphoma reported in literature as that reported by Pourghasemian et al. [5] who reported isolated bilateral ovarian Burkitt lymphoma in a case presenting with an ovarian mass and right adnexal torsion, which was expected as the mass was 12x 10 cm. with a long pedicle, treated by adnexectomy and sent for histo-pathological examination which confirmed the diagnosis. Similar to

the current study the tumor markers in their cases were all normal; however, their patient was a fourteen years old girl, unlike the current case which was twenty-two.

Another case of bilateral Burkitt lymphoma was reported by lee et al. [6], in a ten-year old girl presenting with abdominal pain, constipation and left ovarian torsion managed by left salpingo-oophorectomy followed by chemotherapy.

Almost like this case, a 25 old woman was represented by mass in the right ovary with a similar complaint and unilateral salpingectomy was done for her and the histo-pathological examination revealed the same diagnosis [8].

The above-mentioned case reports showed that primary ovarian lymphomas have no specific clinical presentation. It may be represented by abdominal discomfort, ascities, abdominal enlargement (as in the current case) and/or adnexal torsion, even with general weakness, dyspnea, fever and diaphoresis as the case presented by Brisen-Hernandez et al [7], who reported these symptoms in a thirty-one years old woman treated by bilateral removal of ovarian tumors. Such cases are usually managed surgically and discovered only when the histo-pathological examination results are revealed. The decision of unilateral adnexectomy or even bilateral removal of both ovaries based on their gross appearance is very difficult and challenging regarding the age of the patient and the possibility of management by chemotherapy. This is mainly due to their rarity.

Conclusion

Ovarian lymphoma should be considered in the differential diagnosis of malignant ovarian masses regardless of the age of the patient.

Chemotherapy is the mainstay in the management of ovarian lymphoma, so

radical surgery is not recommended in order to preserve fertility, as guided biopsy should be considered in the plan of diagnosis of solid ovarian masses since you can avoid unnecessary interventions.

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