

Lymphoma ovarii case survey

Katarina Mastilović, Darjana Jovanović, Tatjana Ivković Kapicl, Stana Kopitović

SUMMARY

One of the very rare types of the ovarian tumor is lymphoma. The origin of ovarian lymphoma is primary only if it arises from ovarian tissue. The paper describes a case of ovarian lymphoma in a 42-years old patient. The patient was operated; histopathological finding confirmed lymphoma of the ovaries.

Key Words: Ovarian Neoplasms; Lymphoma

INTRODUCTION

Because their tissue is pluripotent, ovaries are very susceptible to various histopathological forms, malignant and benign tumors. One of the very rare types of the ovarian tumor is lymphoma. The origin of ovarian lymphoma can be primary if it arises from ovarian tissue or secondary when the disease disseminates from some other place. Primary ovarian lymphoma is very rare and they are usually non-Hodgkin lymphomas, while Hodgkin ones are less common.

Lymphomas are primary tumors of immune system i.e. they are primary neoplasms of lymph nodes. In more than 95% of the cases they originate from lymphocytes, while in 5% of the cases they originate from histiocyte and they are called reticulosarcomas. Malignant lymphomas are divided in two groups: non-Hodgkin lymphomas and Hodgkin lymphomas, and in total, they make 6% of all malignant tumors.

Non-Hodgkin lymphomas are rapid malignant growing of lymphocytes, in 80% of the cases there is a malignant growing of B lymphocytes, in 20% of the cases T lymphocytes while the cases of the histiocyte malignant growing is very rare and it occurs in only 5% of the cases. There is a typical infiltration of lymph nodes. There is a typical infiltration of lymph nodes while they rarely primarily occur in out-lymph organs, which are usually secondary, affected as a consequence of the disease dissemination which is caused by histopathological type of lymphoma (1). Lymphomas are diagnosed based on histopathological findings, immunophenotyping, and cytogenetic tests. Diagnostic staging is established by means of clinical picture, laboratory analysis, biopsy and Ph analysis of lymph gland or other tissue or organ, X rays, CT, NMR, contrast scan, various endoscopies and scintigraphy of certain organ or if necessary of the whole body (2,3).

The prognosis of the disease depends on histopathological type, clinical stage of the disease, the values of LDH markers as well as the patient's status performance. These prognostic factors are relevant for determination of adequate therapy and treatment results, that is, the level of achieved remissions. The therapies of malignant lymphoma can be radiation or chemotherapy, modalities of new citostatics or modulators of biological response, transplantation of hematopoiesis original cells or gene therapy (4-6).

Surgical treatment with local radiotherapy or systemic chemotherapy is recommended in the cases when the disease is localized.

CASE SURVEY

This work describes the case of a patient with malignant ovarian lymphoma, 42 years old, two vaginal labors, no abortion, menarche at 13 years of age, menstrual cycle (28/4 days), last menstruation normal. The disease had started a year before it was diagnosed with occasional pains in the small pelvis, especially on the right side, and occasional temperature rises. A month

before the operation, the adnexal tumor mass was discovered by the clinical palpatory examination, so the additional diagnostics was done after that.

Ultrasound (US) examination of the small pelvis confirmed the existence of adnexal changes on both sides (4x5 cm and 6x7 cm). Ultrasound of the upper abdomen showed the existence of lymph node, retropancreatic conglomerate, hydronephrosis of the left kidney grade I/II, and suspected infiltration of the left kidney upper pole by retroperitoneal tumor mass, which was inseparable of the upper kidney pole.

Laboratory finding showed the increased erythrocyte sedimentation. The patient was operated. Hysterectomy, ovariectomy on both sides, and omentectomy was done.

Intraoperative finding: uterus small, of smooth surface, both ovaries, whose size was about 7x7 cm, were in tissue growths, omentum macroscopically normal, liver and other abdominal organs without changes. There was no free fluid in the abdomen.

Histopathological finding of both ovaries was malignant lymphoma, high grade, diffuse B cell type. Clinical Costwald's stage was II b.

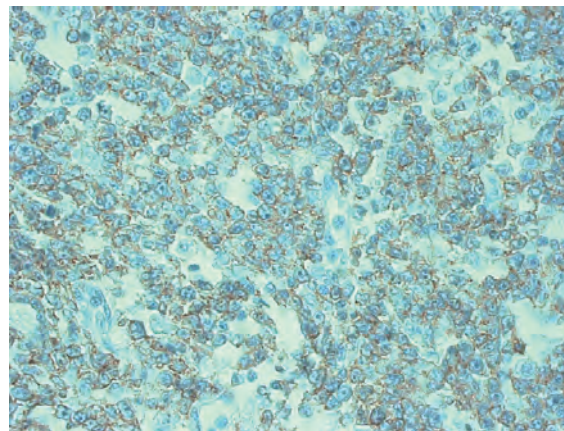


Figure 1. Immunostaining in diffuse large B-cell lymphoma of the ovary. The cells show strong membrane staining for CD20. B-SA, x200

DISCUSSION

Lymphoma of the ovary can be divided into two types: primary lymphoma and disseminated lymphoma of the ovary.

Before the diagnosis of primary extranodal lymphoma can be made, the presence of lymph node, blood, and bone marrow involvement by the disease must be carefully excluded, and the involvement of the affected organ must be the first manifestation of the disease (7). This is of considerable impor-

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Oncology Institute of Vojvodina,
Sremska Kamenica, Serbia

Correspondence to:
Dr. Katarina Mastilović, Oncology
Institute of Vojvodina, Institutski put 4,
21204 Sremska Kamenica, Serbia

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tance because there is now good evidence that primary extranodal lymphoma tends to run a less aggressive course than does lymphoma affecting the lymph nodes (8). Although primary extranodal lymphoma is not uncommon, the ovary is an infrequent site, and the number of well-documented cases reported in the literature is fewer than 70.

It happens very often that non-Hodgkin lymphomas arise in the places of chronic inflammatory process, chronic inflammatory infiltrate, especially in the cases of viral infection and autoimmune diseases. The disease can primarily spread on skin, breast, bones, endocrine glands, lungs, salivary glands, liver, kidney, prostate gland, ovary (9).

Primarily, lymphomas can arise in any organ or tissue and more often they are non-Hodgkin lymphomas than Hodgkin ones. Yet, it still is a lymph tissue or organ in most cases (3). Then, they spread per continuity, lymphogenically and haematogenically to nearby and far lymph glands, while other lymphomas are spread from the very beginning of the disease.

The clinical picture of a lymphoma depends on its localization. Approximately, 50% of Non Hodgkin lymphoma cases are shown with gradual enlargement of lymph glands, which are normally 4 cm large, of medium consistency, isolated or combined in packages, movable in regard to the base and skin, and they are painless. A quarter of the cases have general disease symptoms at the very beginning of the disease with fever and night sweat, weight loss of more than 10% for six months. With other patients, the clinical course of the disease and its symptomatology depend on the localization i.e. on the affected tissue or organ. In regard to that, there may appear hepatomegaly, splenomegaly with pancitopenia, skin efflorescence, and leukemic reaction. The diagnosis of primary lymphoma of the ovary can be made only if, in addition to the general criteria for the diagnosis of extranodal lymphoma mentioned earlier, the tumor is confined to the ovary at the time of diagnosis (10). Primary lymphoma of the ovary is very rare. Only histopathological finding after surgery treatment confirms diagnosis because clinical findings are unspecific.

Conflict of interest

We declare no conflicts of interest.

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