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**Case Report: Primary Lymphoma of The Cervix.** 

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## **ABSTRACT**

Background & Aim: Female genital lymphoma is a rare disease that affects an estimated 1.5% of all non-Hodgkin's lymphomas and accounts for less than 0.5% of all female cancers. (1) Since primary cervical lymphoma is a rare disease, there is little knowledge regarding its proper diagnosis, treatment and prognosis. (2, 3). A 43 years old housekeeper with complain of vaginal discharge and bleeding was referred to a gynecologist. In the examination, the thickness and stiffness of the cervix was observed and in sonography, enlargement of uterus to 115 x 61 x 58 mm dimensions were reported. Myometrial echo was heterogeneous, and then the patients under went hysterectomy. Postoperative CT scan was performed: No sign of lymphadenopathy of retroperitoneal, Paraaortic and internal pelvic was present, No lymphadenopathy of mediastinal and hilar was seen. Pathological assessment of uterus and its appendages showed lymphoma involvement of the cervical area. The microscopic assessment suggested diffuse large cell lympjoma which was later confirmed by IHC and shows B-cell markers. Then the patient received 8 cycles of R-CHOP regimen. Follow up CT-scans were all normal and in the last CT-scan external iliac lymphadenopathy was seen as a new finding which was prospected for examination, but the patient had not still approached.

Keywords: cervical lymphoma, case report.

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## INTRODUCTION

Lymphoma is defined as the neoplastic proliferation of lymphoid cells And is the seventh most common malignancy worldwide .(4, 5)Lymphomas of the female genital tract are very rare. Primary lymphoma of female genital tract is a rare disease that accounts for about 1.5% of total primary non-Hodgkin's lymphoma of the cervix, which is less frequent compared to the secondary lymphoma. This condition includes less than 0.5% of all female cancers.(1, 2)

About 30% of patients with non-Hodgkin's lymphoma have extranodal involvement and the most common site of this type of involvement are gastrointestinal tract and skin or it may involve the female reproductive system completely(1, 3, 6)

The most common symptom of cervical lymphoma is unusual vaginal bleeding(7)Other symptoms may include vaginal discharge, painful intercourse with pelvic pain and presence of abdominal or pelvic mass in the examination. However, fever, night sweats and weight loss are rare in cervical lymphoma.(5, 7)

Many patients with B-cell lymphoma are accidentally diagnosed during routine Pap smear tests. (1)

There is no defined standard treatment for this disease because of its rarity therefore, we decided to report the diagnosis and treatment steps of this patient.

## Case report

A 43 years old housekeeper woman was referred to a gynecologist with complaints of vaginal bleeding and discharge. Sonography was done and bifocal hypoechoic with dimensions of  $32 \times 12$  and  $26 \times 27$  mm in the cervical channel was reported. Right ovary was  $25 \times 21$ mm and left ovary was reported  $30 \times 19$  mm (Normal Echo, without cysts or tumors). Uterus was larger than normal with dimensions of  $58 \times 61 \times 115$  mm and the myometrial echo was also heterogeneous.

Then the patients under went TAH-USO surgery and in the histological assessment, a tumoral lesion was vaguely seen with unclear margins in the wall of the cervix. Microscopic assessment of infiltration showed large lymphoid cells which were proliferating in the wall of cervix and had penetrated intro the muscles.

After immunohistochemistry (IHC) studies the final diagnosis was a malignant high grade diffuse large B-cell lymphoma. Secretory endometrium, ovary and right tube were also without tumoral involvement and also endometrium was in secretory phase.

Post-operative CT scan was performed on the patient: lack of retroperitoneal and para-aortic lymphadenopathy, no internal pelvic lymphadenopathy, splenic volume was upper limit normal and no hilar and mediastinal lymphadenopathy was present. After the above, the patient received 8 cycles of R-CHOP regimen.

CT scans of brain, neck and lung, abdomen and pelvis were in normal limits while the spleen was significantly enlarged. At the end of treatment, all CT scans were normal and the spleen was slightly enlarged.

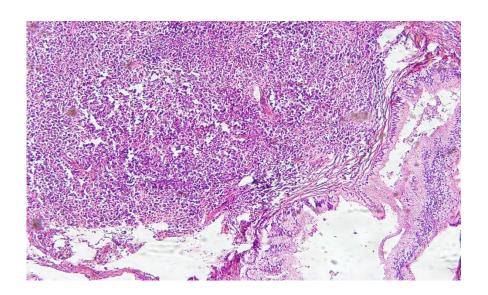
For prophylaxis of CNS, three courses of high dose HDM-TX were administered.

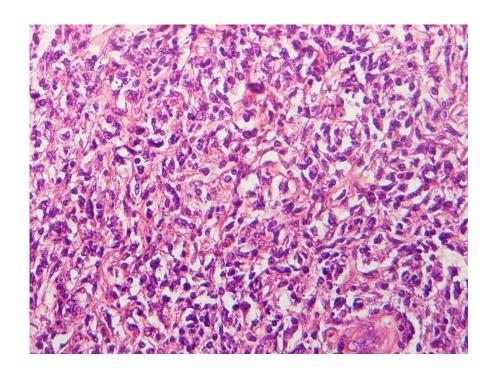
Follow up CT scans were all normal.

Evaluation of bone marrow biopsy showed no involvement by lymphoma, and only a slight erythroid hyperplasia was observed.

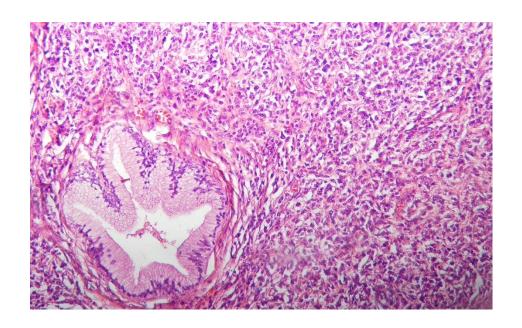
No relapse was seen in the patient during the two-year assessment.

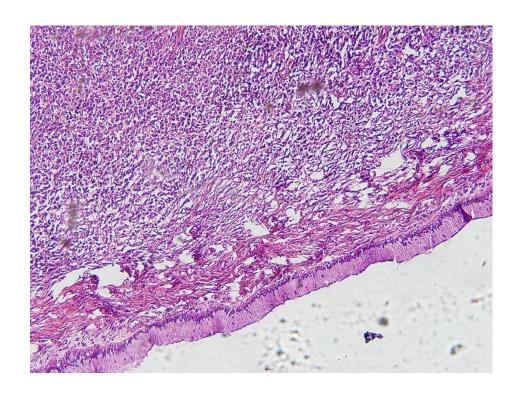














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## DISCUSSION

Primary Non-Hodgkin's lymphoma of the cervix is very unusual. Based on the studies of Chorltont et al, it was reported that only 0/12% of non-Hodgkin's lymphoma originate from the cervix(4). Age of diagnosis among studied cases was between 20-80 years but the average age in the studies was between 42 to 52 years(8).

Reported symptoms of cervical lymphoma included bleeding (70%), vaginal discharge (20%), pelvic pain (40%) and symptoms of B level but the most common complaints of patients were abnormal vaginal discharge and bleeding.(2, 4, 8, 9).

Symptoms of fever, weight loss, night sweats, fatigue are prevalent in systemic lymphoma but rare in lymphoma of cervix .(9)

In our case the main symptom and complaint of the patient was the unusual vaginal discharge.

CT scan is a commonly used study in the diagnosis of non-Hodgkin's lymphoma which enables the identification of tumor sizes and its spread, as well as implementing a suitable treatment regimen and post-treatment follow up.

Treatment for cervical lymphoma is generally divided into two categories of chemotherapy and surgery. Young individuals who are willing to have the chance for pregnancy are treated with chemotherapy, which is the first choice treatment for lymphoma of the cervix.(1, 7, 10)

At least in one study, surgery alone has been successful(4), although other studies reported that surgery alone had slight effects on the treatment. In researches, it was observed that of every 6 cases with previous subtotal cervical lymphoma, the primary surgery leads to abdominal recurrence .(8, 9)

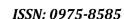
Our presented case also after the surgery and receiving 8 courses of R-CHOP regimen went under post-treatment. Postoperative follow-up indicated that the patient was improving.

# **CONCLUSION**

Considering the previous studies and with respect to our presented patient in this study, it can be suggested that the best treatment for patients with cervical lymphoma in many cases is the combination of surgery and chemotherapy, while used dosage in chemotherapy depends on the condition and spread of the disease.

# **REFERENCES**

- Juanita Parnis DJC, Darko Babic, James DeGaetano, and Charles Savona-Ventura. Lymphoma of the Cervix. Hindawi Publishing Corporation Case Reports in Hematology 2012:4.
- [2] Ab Hamid S WML. Primary non-Hodgkin's lymphoma presenting as a uterine cervical mass. Singapore Med J. 2008;49((3)):e73.
- [3] Gunjan Baijal BV, Donald J Fernandes, MS Vidyasagar. Diffuse large B-cell lymphoma of the uterine cervix: A rare case managed novelly. J Cancer Res Ther. 2009; 5(2).
- [4] Chorlton I KRJ, King FM, Norris HJ. Primary malignant reticuloendothelial disease involving the vagina, cervix, and corpusuteri. Obstet Gynecol. 1974;44:735-48.
- [5] Szantho A BJJ, Csapo Z, et al. Primary non-Hodgkin's lymphoma of the uterine cervix successfully treated by neoadjuvant chemotherapy. GynecolbOncol. 2003;89:4.
- [6] Luc Darnige RgPdL, Laurence Zemori, Ge´rard Socie´, Anne-Marie Fischer, Dominique Helley. Primary lymphoma-like lesions of the uterine cervix. British Journal of Haematology. 2011;153:14.
- [7] M S THYAGARAJAN, M J DOBSON, A BISWAS. Appearance of uterine cervical lymphoma on MRI. The British Journal of Radiology. 2004;77:4.
- [8] Cantu de Leon D PMD, Chanona Vilchis J. Primary malignant lymphoma of uterine cervix. Int J Gynecol Cancer. 2006;16:5.





- [9] Dursun P GM, Bozdag G, et al. Primary cervical lymphoma: report of two cases and review of the literature. Gynecol Oncol. 2005;98:6.
- [10] Jitti Hanprasertpong TH, Theerinthorn, Thammavichit, Daolada Kongkabpan, Kobkul Tungsinmunkong, Nutthaporn. Chandeying. Primary non-Hodgkin's Lymphoma of the Uterine Cervix. Asian Pacific Journal of Cancer Prevention. 2008; Vol 9,:363-6.