

**Lymphoid Neoplasms of the
Female
Reproductive Organs
General Aspect**



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Lymphoid Neoplasms of the Female Reproductive Organs

☞ Rare

most common sites:

☞ Ovaries

☞ uterine cervix

☞ uterine corpus

☞ Vagina

☞ Vulva

☞ fallopian tubes

- ❧ Nearly all cases are **non-Hodgkin's** lymphoma of B lineage
- ❧ **Diffuse large B-cell lymphoma** is the most common type throughout the female reproductive organs
- ❧ **T-cell lymphoma is very uncommon**
- ❧ Natural killer (NK)-cell lymphoma and Hodgkin's lymphoma are exceptional
- ❧ When lymphoma develops during **pregnancy**, involvement of reproductive organs is common; it is especially frequent in cases of **Burkitt lymphoma**

Primary Ovarian Lymphoma



- ☞ < 1% of lymphomas present with ovarian involvement
- ☞ < 1.5% of neoplasms arising in the ovary are lymphomas
- ☞ In countries where Burkitt lymphoma is endemic, however, the most common malignant ovarian neoplasm among children and adolescents is Burkitt lymphoma

Clinical Features



- ↻ **Age:** early childhood to advanced age, with a peak incidence in the 30s or 40s
- ↻ **The presenting complaints:** non-specific symptoms related to the presence of a **mass(abdominal pain or distension)**
- ↻ A minority have fatigue, weight loss, fever, or abnormal vaginal bleeding
- ↻ **more often unilateral** than bilateral

Pathologic Features



The most common lymphomas :

- ❧ Diffuse large B-cell type
- ❧ Burkitt lymphoma
- ❧ Follicular lymphoma

Diffuse Large B-Cell Lymphoma



- ☞ Tumor cells may grow in cords and nests, simulating carcinoma , or be elongate and grow in a storiform pattern, mimicking a sarcoma
- ☞ A few DLBCL lymphomas have a component of follicular lymphoma

Burkitt Lymphoma



- ☞ Most commonly among girls and young adult women
- ☞ More often bilateral than other ovarian lymphomas

clinical forms:

- ☞ Sporadic
- ☞ Endemic
- ☞ immunodeficiencyassociated

Follicular Lymphoma



- ☞ Middle-aged and older patients
- ☞ May be entirely follicular or may have conspicuous diffuse areas.

Rare Lymphomas



- ❧ plasmablastic lymphoma
- ❧ anaplastic large cell lymphoma
- ❧ T-lymphoblastic lymphoma
- ❧ ALK+ diffuse large B-cell lymphoma
- ❧ Extranodal marginal zone lymphoma

Secondary Ovarian Lymphoma

- ❧ **ovary** is a **relatively common** site of involvement
- ❧ **7% -25 %** of women dying with lymphoma have ovarian involvement
- ❧ **Mediastinal large B-cell lymphoma** has a distinct tendency to involve the ovary

Lymphoma of the Fallopian Tube

Primary Lymphoma of the Fallopian Tube

❧ Rare

❧ One case of primary tubal marginal zone lymphoma associated with salpingitis and one bilateral primary tubal peripheral T-cell lymphoma have been described.

Secondary Tubal Involvement by Lymphoma



- ☞ Relatively common among patients with lymphoma of the ovaries

Most common types :

- ☞ Diffuse large B-cell lymphoma
- ☞ Burkitt lymphoma
- ☞ Follicular lymphoma,
- ☞ Peripheral T-cell lymphoma
- ☞ lymphoblastic lymphoma/leukemia
- ☞ Secondary tubal involvement by extranodal marginal zone lymphoma with abundant amyloid deposition

Uterine Lymphoma



Primary Uterine Lymphoma:

- ☞ <1% of extranodal lymphomas
- ☞ **More often in the cervix than in the corpus**, with a **10:1 ratio** in one series

Clinical Features

- ☞ **Adults** over a broad age range (mean and a median age in the **fifth to sixth decade**)
- ☞ **Symptoms:** abnormal vaginal bleeding
- ☞ A few patients have systemic symptoms such as fever or weight loss

Pathologic features



∞ **Cervical lymphomas:** bulky lesions identifiable on pelvic examination.

The **classic appearance is diffuse, circumferential enlargement of the cervix** (“barrel-shaped” cervix) ,

May be discrete submucosal tumor or a fungating, exophytic mass

Fleshy, ruberry or firm , white tan, ulceration unusual

∞ **uterine corpus:** usually fleshy or soft and pale gray-, yellow-, or cream-colored. They may form a polypoid mass or diffusely infiltrate the endometrium, sometimes with deep invasion of the myometrium

Diffuse Large B-Cell Lymphoma

- ☞ **Most common type of primary uterine lymphoma by far, in both the corpus and the cervix**
- ☞ **Cervical lymphomas** are frequently associated with prominent sclerosis

Follicular Lymphoma



- ❧ Follicular lymphoma is the **second most common** type of uterine lymphoma
- ❧ Follicular lymphomas of all three grades have been reported

Extranodal Marginal Zone Lymphoma



- ☞ A few cases in the endometrium and rare cases in the cervix have been described
- ☞ Endometrial MALT lymphoma has distinctive features. Affected women range from the fifth to the ninth decade, with a median age in the late 50s or 60s.
- ☞ The lymphomas are often incidental findings, usually do not form a mass, and are lymphoepithelial lesions

Rare Lymphomas



- ❧ A few cases of Burkitt lymphoma
- ❧ Rare cases of B-lymphoblastic lymphoma
- ❧ Peripheral T-cell lymphoma
- ❧ Cervical extranodal NK/T-cell lymphoma

Secondary Uterine Lymphoma

- ☞ In contrast to primary uterine lymphoma, **corpus is involved at least as often as the cervix**
- ☞ Uterine involvement is relatively common in patients dying with lymphoid leukemias

Placental Involvement by Lymphoid Neoplasms



- ≈ Approximately 0.1% of women have a malignancy during pregnancy
- ≈ **Rarely, lymphoma or leukemia** may be detected in the placenta of these patients
- ≈ **placental involvement does not lead to spread of the neoplasm to the fetus**
- ≈ Aggressive lymphomas of B and T lineage have been documented to involve the placenta

Vaginal Lymphoma



Primary Vaginal Lymphoma

- ☞ Lymphoma rarely arises in the vagina
- ☞ Broad age range (mean age is in the 40)
- ☞ Patients present with vaginal bleeding, discharge, pain, dyspareunia, or urinary frequency.

Pathologic Features



- ❧ Similar to those of cervical lymphoma
- ❧ 88% are Diffuse large B-cell lymphomas
- ❧ Follicular lymphoma, Burkitt lymphoma, lymphoplasmacytic lymphoma T-cell lymphoma And extranodal marginal zone lymphoma are rare

Secondary Vaginal Lymphoma



- Relapse of lymphoma in the vagina and involvement of the vagina in the setting of widespread disease, is more common than primary vaginal lymphoma

Vulvar Lymphoma



Primary Vulvar Lymphoma

☞ exceedingly rare

☞ Patients are adults who present with a nodule, swelling, or induration of the vulva

Secondary Vulvar Lymphoma



- ❧ Rare
- ❧ The lymphomas have been of various types
- ❧ Mycosis fungoides may involve the vulva