

Primary Non-Hodgkin's Malignant Lymphoma of the Uterus at the Reference Hospital of Maradi/Niger: A Case Report

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Abstract

Malignant non-Hodgkin's lymphoma (MHNL) of the uterus is uncommon. We report a case diagnosed on the basis of histologic and immunohistochemical studies of a hysterectomy specimen induced by a very painful pelvic mass in a 50-year-old patient with no previous history of the disease. It was classified as Ann Arbor IV Bb after imaging, given the medullary infiltration and signs of clinical and biological evolutivity: the patient had received two courses of chemotherapy, CHOP protocol. She died 23 days after the second treatment due to a hypertensive crisis.

Keywords

Malignant Non-Hodgkin's Lymphoma, Uterus, Referral Hospital, Maradi/Niger

1. Introduction

Lymphomas are tumors of the lymphatic system and can develop in any organ containing lymphoid tissue, especially where the lymphoid tissue is dense, most notably in the lymph nodes, tonsils, and mucosa of the small intestine. Lymphoma results from the malignant transformation of T or B lymphocytes. Moreover, since the immune system is ubiquitous throughout the body, any organ can be the starting point for lymphoma [1]. Primary non-Hodgkin's malignant lymphoma (NHML) of the uterine body remains exceptional, with only a

handful of cases described in the literature to date. We report a case of primary LMNH of the uterus diagnosed and managed in our department.

The applicable criteria are as follows.

2. Case Report

Mrs. ZA, 50 years old, G3 P3 L2; no particular history; referred to a hematology consultation by her gynecologist for management of a lymphoma of the uterus. The onset of symptoms was about three months ago, with the appearance of a very painful pelvic mass, progressively increasing in volume, accompanied by nocturnal fever and profuse sweating. Abdominopelvic ultrasonography revealed a highly suspicious heterogeneous mass involving the uterus and left ovary, leading to laparotomy and total hysterectomy with adnexectomy. Histological examination of the operative specimen concluded to a lymphoma of the uterus, and the patient was discharged (**Figure 1**). On admission, the clinical examination revealed a slightly altered performance status (ECOG = 1), moderate pallor, and no palpable mass (hepatosplenomegaly and superficial adenopathies). The rest of the clinical exam was unremarkable. Biologically, immunohistochemistry confirmed the diagnosis: CD20 positive (diffuse); CD5 and BCL2 negative; concluding to a marginal zone lymphoma (most probable entity). Blood count showed moderate normocytic normochromic anemia at 9.4 g/dl; myelogram showed bone marrow infiltration with bone marrow lymphocytosis at 45% (made up of small mature lymphocytes); LDH = 547 IU/L; ESR = 44 mm/h; HIV serology negative; HBsAg negative; transaminases, urea, creatinine, blood glucose and cardiac ultrasound (LVEF 63%) normal.

Overall, it was a uterine primary MALT-type lymphoma with bone marrow infiltration classified Ann Arbor IV Bb.

The patient received two courses of CHOP and died 23 days after the second treatment due to a hypertensive crisis.



Figure 1. Sections of uterus and ovarians. Histological examination: malignant non-Hodgkin lymphoma of the uterus.

3. Discussion

Malignant non-Hodgkin's lymphomas exclusively affecting the genital area are rare, accounting for less than 1% of all lymphomas [2]; primary involvement of the uterine body remains exceptional, and less so than involvement of the cervix [3]. We report the first described case of malignant non-Hodgkin's lymphoma of the uterus in a 50-year-old patient from Niger. Our observation is interesting, as it adds to the small number of cases reported in the international literature. Many authors have observed one case; thus, Borivoj Marjanović *et al.* reported in 2000 a case of non-Hodgkin's lymphoma of the uterus and central nervous system in an 8-year-old girl [4]. Leung F. *et al.* published in 2008 a case of primary malignant non-Hodgkin's lymphoma (LMNH) of the uterine body in a 60-year-old female patient [5]. In 2012, El Mehdi Hissane *et al.* reported a case of primary LMNH of the uterine corpus in a 60-year-old female patient [6]. In 2014, Aysen TB *et al.* found a case of diffuse large B-cell lymphoma infiltrating the myometrial wall, considered to be a primary uterine lymphoma in a 62-year-old woman [7]. In contrast, the 2002 publication by H El Omari-Alaoui *et al.* reported four cases of primary non-Hodgkin's lymphoma of the uterus (two patients had cervical lymphoma, the other two had body lymphoma), with an average patient age of 59 [8]. The analysis of all these observations shows that primary non-Hodgkin's malignant lymphomas of the genital sphere are rare and can occur at any age.

4. Conclusion

Primary non-Hodgkin's malignant lymphoma of the uterus is exceptional. Its diagnosis is made based on a uterine mass and confirmed by histological or immunohistochemical examination of a uterine biopsy or hysterectomy.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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