Primary lymphoma of the uterine corpus: An unusual location for a common disease - case report

K. Niwa[1], *M.D., Ph.D.*; **K. Onogi**[1], *M.D.*; **W. Yun**[1], *M.D.*; **Y. Hirose**[2], *M.D., Ph.D.*; **T. Tamaya**[1], *M.D., Ph.D.*

[1]*Department of Obstetrics and Gynecology,* [2]*Department of Pathology, Gifu University School of Medicine (Japan)*

Summary

A case of a primary uterine corpus lymphoma in a 75-year-old woman is described. Immunohistochemical studies showed diffuse large B-cell type one. Primary lymphoma of the uterine corpus is considered to be an unusual location for a common disease.

Key words: Uterine corpus; Lymphoma; Diffuse large B-cell type; An old woman.

Introduction

Non-Hodgkin's lymphoma of the uterine corpus is extremely rare and occurs in patients of different ages, with the mean age being the fourth decade of life. Histopathologically, diffuse lymphomas of large cells are 80% B-cell type.

We herein describe a case of a histopathologic diagnosis of a primary uterine corpus lyphoma. The diagnosis was unexpected because of the patient's age, the rare location [1] and the unspecific gynecological symptoms.

Case Report

A 75-year-old Japanese woman was referred to the gynecologic department with abdominal distension. A huge abdominal mass was found on physical examination. The superficial lymph nodes were not enlarged and computed chest and abdominal tomography did not indicate lymphadenopathy. The cervical and endometrial cytology findings were negative for malignancy. Magnetic resonance imaging (MRI) (Figure 1A) and pelvic computed tomography (CT) showed a huge enlarged mass suggesting it had arisen from the uterus, and PET showed either leiomyosarcoma or lymphoma (Figure 1B).With a preoperative diagnosis of either lymphoma or leiomyosarcoma, a total abdominal hysterectomy was performed due to abdominal distension. The operative findings were a huge fragile mass which infiltrated the uterus (Figure 1C) with pelvic wall extension. The definitive histological diagnosis was lymphoma of diffuse large B-cell type which infiltrated the uterine corpus (Figure 1D) and pelvic wall. Cytological analysis of ascites was positive for malignancy. Immunohistochemistry demonstrated a B-cell phenotype of lymphoid cells with the following characteristics: CD 20 positive, CD 79a positive, EMA negative, CD 8 positive, CD 30 positive and MIB 70-80%.

After an extensive work-up for staging, the patient was classified as Stage IV. After surgery the patient was administered chemotherapy according to the CHOP protocol. However, she died within one month after surgery due to lung infiltration and respiratory failure.

Revised manuscript accepted for publication January 11, 2007

Non-Hodgkin's lymphoma of the uterine corpus is extremely rare and occurs in patients of different ages, with the mean age being the fourth decade of life. Histopathologically, diffuse lymphomas of large cells are 80% B-cell type.

The diagnosis of a primary uterine corpus lymphoma was unexpected in this case because of the patient's age, the rare location [1] and the unspecific gynecological symptoms.

Discussion

A diagnosis of primary extranodal lympoma is frequently not suspected clinically and it tends to be established only after performing a biospy [2, 3].

Although abnormal uterine bleeding is thought to be the most common presenting symptom, our patient did not make such a complaint. The extension of the disease, the size of the primary lesion and the type of lymphoma have all been reported to be significant prognostic factors [4].

There is no evidence of any advantage of radical gynecological surgery. Because of its rare occurrence, no standard treatment has yet been established for primary uterine lymphoma [5]. However, chemotherapy, radiotherapy and combinations of the two have been successfully applied in cases without disseminated disease.

References

[1] Agrawal A., Ofili G., Allan T.L., Mann B.S.: "Malignant lymphoma of the uterus: a case report with a review of the literature". *Aust. NZJ Obstet. Gynaecol.,* 2000, *40*, 358.

[2] Grabiele A., Gaudiano L.: "Primary malignant lymphoma of the cervix. A case report". *J. Reprod. Med.,* 2003, *48*, 899.

[3] El Omari-Alaoui H., Kebdani T., Benjaafar N., El Ghazi E., Erriahni B., Gueddari B.K.: "Non-Hodgkin's lymphoma of the uterus: apropos of 4 cases review of the literature". *Cancer Radiother.,* 2002, *6*, 39.

[4] Grace A., O'Connell N., Byrne P. *et al.*: "Malignant lymphoma of the cervix. An unusual presentation a rare disease". *Eur. J. Gynaecol. Oncol.,* 1999, *20*, 26.

[5] Szantho A., Balega J.J., Csapo Z., Streter L.L., Matolscy A., Papp Z.: "Primary non-Hodgkin's lymphoma of the uterine cervix successfully treated neoadjuvant chemotherapy: case report". *Gynecol. Oncol.,* 2003, *89*, 171.

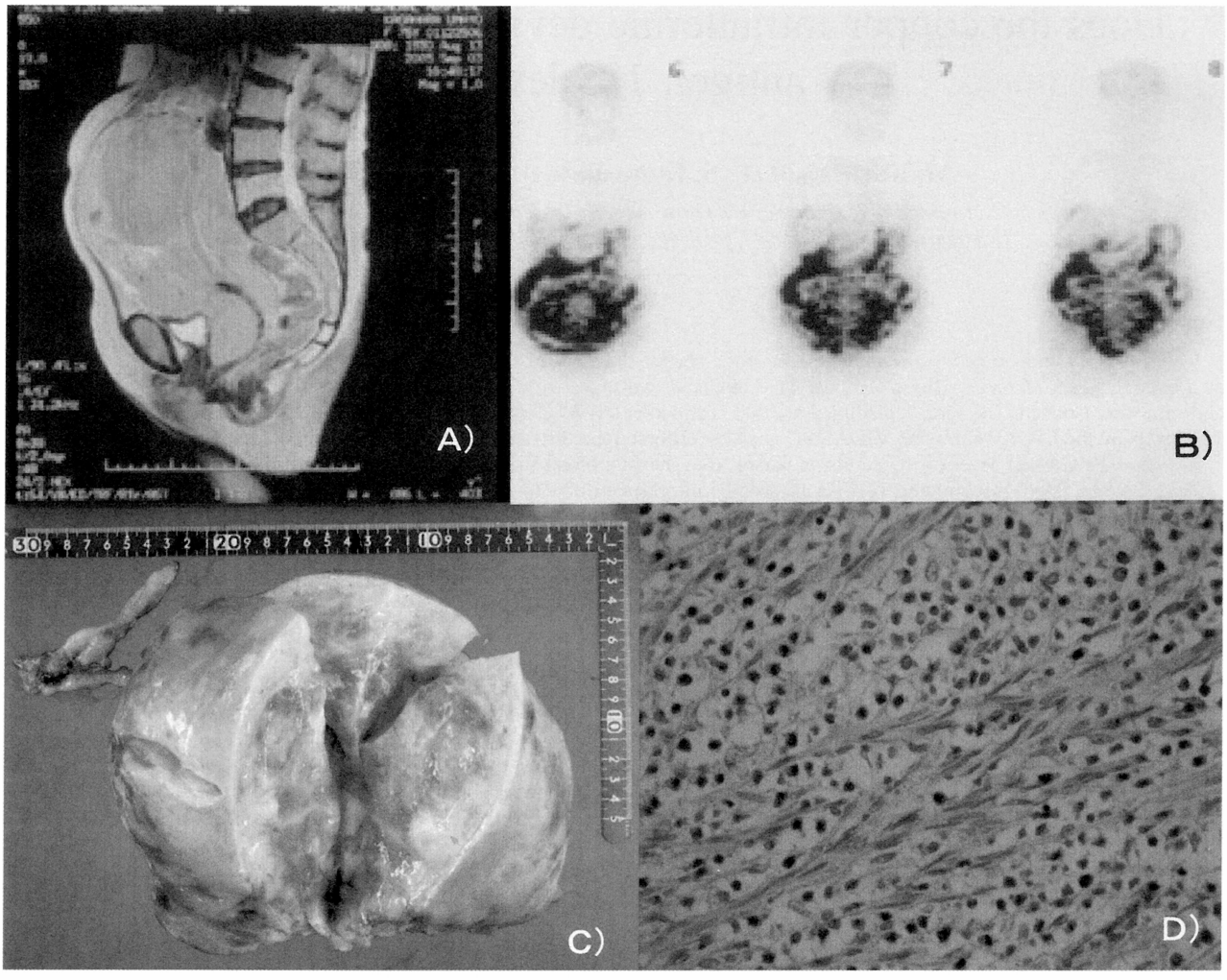

Figure 1A) Pelvic MRI showing a huge enlarged mass, thus suggesting that it had arisen from the uterus.
Figure 1B) PET showing leiomyosarcoma or lymphoma.
Figure 1C) The uterus was entirely replaced by the tumor and was also fragile.
Figure 1D) Atypical lymphoma cells infiltrating the myometrium (H&E stain).

Address reprint requests to:
K. NIWA, M.D.
Department of Obstetrics and Gynecology
Gifu University School of Medicine
(Japan)