Chronic Lymphocytic Leukemia Presenting With Localized Gynecologic Symptoms

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■ **Abstract**

Background. Although no cure exists for chronic lymphocytic leukemia (CLL), treatment can reduce morbidity and/or improve survival in advanced disease. Identification of patients in an early disease state allows monitoring and treatment as soon as appropriate. We were unable to find previous reports of early CLL disease presenting with gynecologic symptoms. This report seeks to alert gynecologists of their potential role in identifying CLL patients.

Case. A 76-year-old woman presented with rectovaginal pressure. Cervical cone biopsy showed a lymphoproliferative process. Peripheral blood flow cytometry confirmed a diagnosis of early-stage CLL. The patient remains asymptomatic and is currently monitored for disease progression.

Conclusion. Early CLL can present with localized gynecologic symptoms or cervical lesions. The recognition of early disease can assure optimal treatment. ■

Key Words: chronic lymphocytic leukemia, cervical dysplasia, colposcopy, gynecologic symptoms, cone biopsy

Chronic lymphocytic leukemia (CLL) is the most common adult leukemia in western societies, and is characterized by the accumulation of small, mature-appearing B lymphocytes in the blood, bone marrow, and lymphoid tissues [1]. It is common to discover CLL incidentally in asymptomatic patients when a routine physical examination reveals nontender lymphadenopathy, or blood work shows an unexplained absolute lymphocytosis. Patients who do show symptoms generally complain of fatigue and malaise, or in cases of more advanced disease, weight loss, recurrent infections, fever, and night sweats [1]. Rare cases have been reported in the literature in which CLL is discovered by the gynecologist once the disease is advanced enough to infiltrate pelvic organs and cause symptoms, such as vaginal bleeding or cervical lesions [2–4]. In these cases of advanced disease, patients reported concurrent symptoms of fatigue or weight loss, alerting the physician to the possibility of CLL. We were unable to find any prior reports of early-stage CLL diagnosed due to findings on colposcopy and cervical biopsy for localized pelvic symptoms. The publication of this report was exempt by the Hartford Hospital Institutional Review Board.

CASE

A 76-year-old, gravida 3 para 3, woman presented to her primary care physician complaining of rectovaginal discomfort for 1 week. A pelvic examination revealed tenderness to the right of the cervix along with an erythematous and friable area on the posterior cervical lip. The patient was referred for gynecologic consultation. Subsequently, a Pap smear, colposcopy, and biopsies of the friable cervical lesion were performed.

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The Pap smear was read as normal, and the cervical biopsies showed atypical lymphoid infiltration associated with ulceration and granulation. A cone biopsy, done subsequently, revealed a dense monomorphous infiltrate of small lymphoid cells. Flow cytometry and immunoperoxidase stain of the lymphoid cells confirmed that they were a monotypic kappa–restricted population of B cells expressing the CD5 and CD20 antigens, the profile typically seen in CLL. A computed tomography scan of the abdomen and pelvis showed no adenopathy. A peripheral blood flow cytometry specimen revealed a monoclonal process similar to that in the cone biopsy specimen, establishing the diagnosis of CLL. Her white blood cell counts were within the reference limits, and she reported no symptoms of fatigue, weight loss, fever, or night sweats. Four years later, she continues to be asymptomatic with normal white blood cell counts and is followed by an oncologist to monitor progression of the disease.

COMMENT

Infiltration of the cervix in any disseminated leukemia is not uncommon. One study reported that 14% of 109 patients with CLL were found to have uterine involvement at autopsy [5]. Uterine and cervical involvement in advanced disease have been reported to cause vaginal bleeding as well as abnormal cervical histology and/or cytology consisting of lymphocytic infiltration [2–4, 6]. Gynecologic symptoms have, in some cases, led the physician to diagnose CLL if it had not been recognized already [3, 4], thus allowing the patient with advanced disease to receive proper treatment. In other cases, however, the patient was previously known to have CLL, and the gynecologic findings served as indicators of disseminated cancer [2].

Although we were unable to find any reports of cervical involvement in the early stages of CLL, before the development of lymphocytosis and/or lymphadenopathy, the current case demonstrates that it is possible. Unusual symptoms or atypical cervical lesions, therefore, should be evaluated to exclude the possibility of early disease. Although treatment is not indicated in such early stages, chemotherapy in later stages, once patients develop symptoms such as anemia, thrombocytopenia, splenomegaly, or symptomatic lymphadenopathy, can reduce morbidity and improve patient survival [1]. Therefore, it is beneficial to identify patients with CLL in its early stages so that they may be monitored for disease progression and therapy can be initiated as soon as appropriate.

In conclusion, it is important for gynecologists to be aware that leukemia and lymphoma, specifically CLL, may first present with pelvic symptoms such as vaginal bleeding or a cervical lesion. The evaluation of such findings, therefore, should be pursued. Whereas previous reports have shown the potential to recognize advanced leukemic disease, this case demonstrates the possibility of recognizing early-stage CLL. With such early detection, the patient may be closely monitored so that therapy can be initiated as soon as it is indicated, thus decreasing the risk of disease-associated morbidity and mortality.

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