The Journal of
OBSTETRICS AND GYNECOLOGY of India

J Obstet Gynecol India Vol. 60, No. 3 : May / June 2010 pg 242-243

Case Report

Granulocytic sarcoma of the cervix

Iyer Vaidehi [1], Salter David [2], Weinstien Stephen [3]

[1]Registrar, Gynecology, QE II Hospital, QLD, [2] Consultant Gynecologist QE II Hospital, QLD, [3] Professor, Department of Pathology, Gold Coast Hospital, QLD

Key words : Granulocytic sarcoma, cervix

Introduction

Granulocytic sarcoma (GS) is a rare manifestation of leukemia and has been reported in 3-5% of acute myelogenous leukemia patients [1]. Involvement of the uterine cervix as the primary manifestation before the peripheral blood and bone marrow show evidence of overt leukemia which is very rare [2].

We report a case of a woman who presented with a routine Pap smear showing HGEA, and cervical biopsy confirming chloroma of the cervix.

Case report

A 34-year-old woman was referred to our colposcopy clinic with an abnormal Pap smear. Colposcopy and cervical biopsy showed malignant CD 43 infiltrate. Immunoperoxidase stains showed endocervical involvement by acute myeloid leukemia (Figure 1). She was referred to the hematologist for further management. CT of the neck showed significant cervical lymphadenopathy. No significant lymphadenopathy was detected elsewhere. This showed that the condition was localized to the cervical region only. In view of the chloromatous involvement of the cervix, there was always risk of supervening acute myeloid leukemia. She was treated with combination chemotherapy. Her follow up colposcopy and Pap smear were normal.

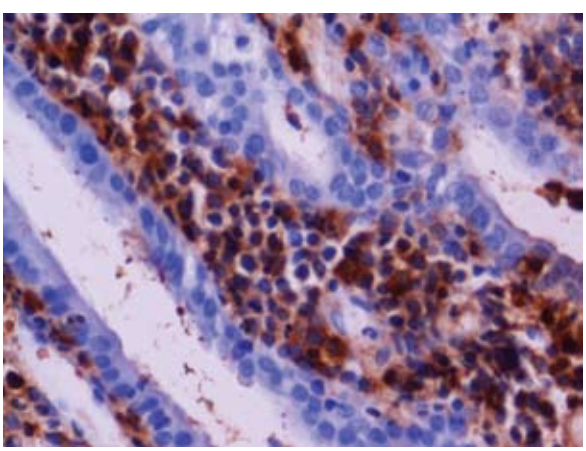

Figure 1. 4x - Cervical tissue showing endocervical glands with intervening stroma heavily infiltrated with leukemic cells (Myeloperoxidase Stain).

Discussion

Granulocytic sarcoma (GS) is a term applied to localized malignant tumors, although it can involve every organ in the body. Due to its similarity to other sarcomas it needs special staining. We used immunoperoxidase stain

Paper received on 13/01/2007; accepted on 28/02/2008

Correspondence :
Dr. Iyer Vaidehi
Unit 2/1 Hemdan Court,
Nambour QLD 4560
Tel. 0400887330 Email : vvaiju@hotmail.com

to confirm the diagnosis.

Clinically GS is frequently silent [3]. On rare occasions symptomatic GS may precede blood and marrow involvement [4]. Our patient was lucky, as she was diagnosed with an abnormal Pap smear, and was treated immediately without waiting for the overt clinical picture to develop.

The length of the time from the initial diagnosis of GS to the onset of leukemia varied from five weeks to over three years [5]. In our case we did not wait for the peripheral blood picture to develop.

The GS rarely occurs before the age of 1 year and after the age of 60. Our patient was only 34.

GS is a systemic disease. Therefore, the chemotherapy administered in acute myeloid leukemia was advocated. Our patient had a complete remission to only systemic chemotherapy. Prognosis of chloroma is poor, generally with short survival rates due to the progression of the leukemia even in patients presenting with isolated chloroma. We evaluated the responsiveness of systemic chemotherapy by follow up colposcopy and Pap smear. The results showed negative findings for GS.

References

1. Lee JW, Kim YT, Min YH et al. Granulocytic sarcoma of uterine cervix. Int J Gynecol Cancer 2004;14:553-7.
2. Park CI, Kim TS, Lee YB. Granulocytic sarcoma of the uterine cervix preceding myelogenous leukemia. Yonsei Med J 1980;21:36-42.
3. Muss HG, Moloney WC. Chloroma and other myeloblastic tumors. Blood 1973;42:721-8.
4. Lusher JM. Chloroma as a presenting feature of acute leukemia. A report of two cases in children. Am J Dis Child 1964;108-62-6.
5. Brugo EA, Larkin E, Molina-Escobar J et al. Primary granulocytic sarcoma of the small bowel. Cancer 1975;35:1333-40.