Case Report

Granulocytic sarcoma of the cervix

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Introduction

Granulocytic sarcoma (GS) is a rare manifestation of leukemia and has been reported in 3-5% of acute myelogenous leukemia patients¹. Involvement of the uterine cervix as the primary manifestation before the peripheral blood and bone marrow show evidence of overt leukemia which is very rare².

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).

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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 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.

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