

Granulocytic Sarcoma presenting as a vaginal nodule in chronic myeloid leukemia

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Granulocytic sarcoma (chloroma) is a localized tumour composed of immature cells of granulocytic series. Although known to occur in various organs of the body, vaginal involvement is rare. A case of granulocytic sarcoma of the vagina in a female patient with chronic myeloid leukemia is reported.

A 50 years old postmenopausal female was admitted to the Govt. Medical College & Hospital, Nagpur, because of abnormal vaginal bleeding for one week. She also complained of malaise, weakness and an occasional episode of bleeding for one month. Gross pallor was noted with grade II nontender splenomegaly, but liver was normal in size. No free fluid was present in the peritoneal cavity.

Other systems were clinically within normal limits. On per speculum examination, a nodule of size 2" x 2" was noticed in the posterior wall of the vagina near the posterior lip of cervix. The nodule was well circumscribed, bright red in colour & bled on touch. The cervix and rest of the vagina were normal.

On admission haemoglobin was 7.4 gm%, haematocrit was 30%, total leucocyte count was 120,000/cumm. Differential leukocyte count showed blasts 2%, promyelocyte 8%, myelocyte 15%, metamyelocyte 10%, band forms 12%, neutrophils 42%, lymphocyte 4%, eosinophils 4% and basophils 3%. Platelet count was 2.6 lacs/cumm. Thus haematologic studies established the diagnosis of chronic myeloid leukemia with possibility of leukemic infiltrate in vagina. The vaginal nodule was resected and sent for histopathological examination.

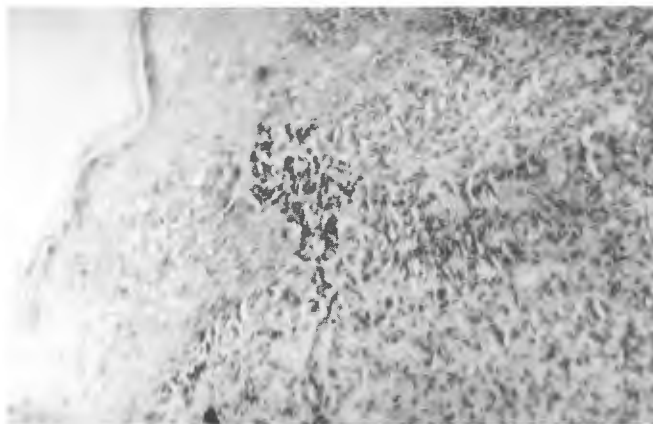


Fig. 1 : Note normal epithelial lining, subepithelial tissue showing diffuse infiltrate of immature cells. (H & E x 100)

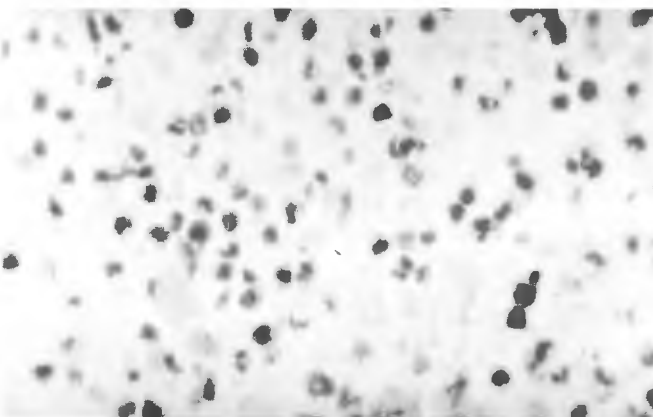


Fig. 2: Well differentiated granulocytic sarcoma. Many of the tumour cells contain cytoplasmic (eosinophilic) granules. (H & E x 200)

Histopathology

The tissue was fixed in 10% formalin and processed as routine. Microscopic sections stained with hematoxylin and eosin showed a normal strip of stratified squamous epithelium, (Fig 1). Subepithelial tissue showed diffuse infiltration of immature cells of granulocytic series. Few undifferentiated cells in the form of large cells with vesicular nucleus and prominent nucleoli were also seen. However, under higher magnification eosinophilic myelocytes could be identified in the section (Fig. 2). It was diagnosed as granulocytic sarcoma of the vagina. Peroxidase stain was performed to confirm the myelogenous origin of the cells. It showed dark brown to black granules in the cytoplasm of the malignant cells.

Treatment and follow up

Patient was put on therapy with hydroxyurea and advised to get blood counts done every week. Patient was discharged after 7 days and was lost to follow up.

WORLD ASSOCIATION OF PERINATAL MEDICINE

ANNOUNCEMENT

The World Association of Perinatal Medicine will be presenting the Erich Saling Perinatal Prize during the opening ceremony of the World Congress of Perinatal Medicine which will take place in Barcelona on September 3, 2001.

The prize is a unique artistic statue representing mother, father and child and \$10,000.

Criteria for nominees should be:

A contributor to the overall development of perinatal medicine, an internationally recognized personality based on original scientific publications of the last 10 years.

Suggestions should include a CV of the candidate and should be submitted by July, 2001.

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