# Giant cell carcinoma of the endometrium

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#### **Abstract**

Giant cell carcinoma of uterus is a rare form of endometrial carcinoma. We describe one such case in a seventy year old female who presented with post menopausal bleeding. Gross examination revealed diffuse polypoidal growth in endometrium. Microscopic examination revealed highly pleomorphic multinucleated giant cells diffusely infiltrating into myometrium.

### INTRODUCTION

Endometrial carcinoma is the most common invasive carcinoma of female genital tract and accounts for 7% of all invasive cancers in women <sup>1</sup>. Several variants of endometrial carcinoma have been described in literature, endometrioid variant being the most common. Giant cell carcinoma is a recently described variant of endometrial carcinoma with characteristic histopathological features. It is rare and infrequently reported entity. Only six cases have been reported in literature so far <sup>2</sup>. We present an additional case of the giant cell carcinoma in a seventy year old female.

## **CLINICAL SUMMARY**

A seventy year old female presented with history of postmenopausal bleeding since six months. Bleeding was intermittent with passage of clots and fresh blood. On pervaginal examination, the uterus was enlarged. Ultrasound examination showed diffuse polypoidal growth involving whole of the uterine cavity. Total abdominal hysterectomy with bilateral salpingo-oophorectomy was done and specimen was sent to us for histopathological examination.

#### **PATHOLOGICAL FINDINGS**

On gross examination, the uterus with cervix measured 10 x 6.5 x 6.0cm. The endometrial cavity was covered with fleshy grey white, polypoidal growth, which was extending into myometrium (Fig 1). In some areas, the growth was reaching up to serosal surface. Three tumor nodules varying in size from 5mm to 2cm were identified on the serosal surface. The cervix. was within normal limits. Both fallopian tubes and ovaries were also within normal limits.

Figure 1

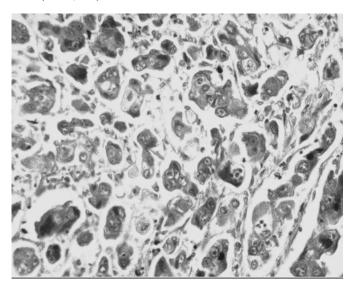
Figure 1: . Endometrial cavity showing fleshy grey white, polypoidal growth



Microscopic examination showed nests, sheets as well as isolated population of multinucleate giant cells. These giant cells were showing pleomorphic vesicular nuclei with prominent nucleoli and abundant dense eosinophilic cytoplasm (Fig 2). The cells were infiltrating into myometrium and were reaching upto serosa in some areas. Focal areas of endometrial adenocarcinoma of usual type were also present .Tumor nodules on the serosal surface also showed similar microscopic features.

## Figure 2

Fig2. Photomicrograph showing sheets of pleomorphic giant cells (H&E,40x)



#### **DISCUSSION**

Giant cell carcinoma is a rare pleomorphic form of high grade endometrial carcinoma featuring poorly cohesive sheets and nests of bizarre multinucleate giant cells. Similar giant cell carcinomas have also been reported in cervix <sup>3</sup> and fallopian tubes <sup>4</sup>.

Jones et al <sup>2</sup> have reported a short series of six patients with giant cell carcinoma. The patients ranged in age from 43 to 85 years (mean 65), five were postmenopausal. All the

patients presented with vaginal bleeding. All the tumors of their series had giant cell component. All these tumors contained at least focal areas of endometrial adenocarcinoma of one usual type. Occasional giant cells were positive for cytokeratins (AE I \ AE3 or CAM5.2) and epithelial membrane antigen, the desmin and smooth muscle were negative in all tumors tested. Four of six patients in whom tumor invaded more than superficially developed recurrent tumor and three patients died of disease within three years.

Giant cell carcinoma of endometrium is an aggressive tumor that should be distinguished from other endometrial tumor with prominent giant cell component including trophoblastic tumor, certain primary sarcomas and malignant mixed mullerian tumors. It is imperative that malignant giant cells and non-neoplastic giant cell should not be confused in curettage or biopsy.

### References

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