



A CASE OF RARE ABDOMINOPELVIC MASS - MALIGNANT BRENNER TUMOUR OF OVARY

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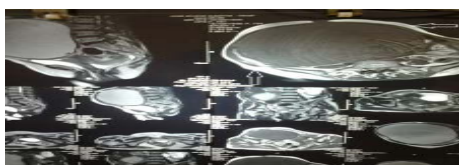
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Abstract : Brenner tumour is one of the rare tumours of ovary constituting only 2.3 percent of which most are benign . Malignant Brenner is a much rarer entity with only 0.02 percent incidence of all ovarian neoplasms. Here we present an elderly postmenopausal female presenting with an abdominal distension, on clinical examination found to be an abdominopelvic mass .Imaging modalities revealed right malignant ovarian mass for which total abdominal hysterectomy with bilateral salpingoophorectomy was done .Histopathological features were suggestive of malignant Brenner tumour .We report this case for it s rare presentation and unique characteristics.

Keyword : Brenner tumour , CA 125, Hysterectomy with bilateral salpingoophorectomy

CASE REPORT

A 67 year old female presented with features of abdominal distension for fourteen months which was progressing gradually in size .She attained menopause by 53 years of age. Rest of the medical history was uneventful. Clinical examination revealed a right sided abdomino pelvic mass extending upto the epigastrium. Pervaginal examination revealed a firm adnexal mass felt through right fornix. Ultrasonography revealed a large cystic lesion in the pelvis more to the right side extending upto epigastrium measuring 20 x 17.4 cm with low level internal echoes .There was no free fluid in the abdomen .CT abdomen and pelvis showed an evidence of large cyst measuring about 20.6 x16.8x18.2 cm in the lower abdomen and pelvis with solid components and septations .Ovaries could not be visualised separately from the lesion suggesting a ovarian cyst with malignant potential. Leftovary was normal with no evidence of peritoneal seedlings and secondary deposits. Rest of visualised abdominal viscera were normal.



The serum levels of CA 125 were found to be grossly elevated (195.6 U/ml) with normal reference range of less than 35 U/m



She underwent staging laparotomy . Intraoperatively a mass of size 20 x 18 cm is seen to be arising from the right ovary with intact capsule. Macroscopically the tumour was predominantly cystic with solid areas and diffuse calcification .The other ovary was found to be normal .There was no free fluid in the abdomen and peritoneal seedlings .Other abdominal organs were found to be normal . Hysterectomy with bilateral salpingoophorectomy was done. Histopathologically the mass showed features of malignant Brenner tumour. Patient is undergoing chemotherapy with cyclophosphamide, Doxorubicin and Cisplatin regimen and is currently on follow up



DISCUSSION:

Among all the ovarian tumours, Brenner tumour is the rarest entity constituting 2.5% of which malignant Brenner accounts for 2%. It arises from the surface epithelium of ovary which undergoes transitional metaplasia. In 5% of cases it is bilateral. Usually the size of the tumour is less than 5 cm though they can grow to a huge size. Histological features of malignant tumour shows multilayered transitional epithelium with classic nuclear grooving and abundant mitotic figures along with evidence of invasion. There is high likelihood of confusion of the Brenner tumour with transitional cell carcinoma of ovary.

Hull and Campbell histological criteria was proposed to identify malignant Brenner tumour. I. Frank malignant histological features should be demonstrated II. Intimate association between malignant and benign component III. Stromal invasion by epithelial components should be demonstrated IV. Absence of mucinous cystadenomas or if present should be well separated from Brenner tumour If the histological features satisfy any three criteria then a diagnosis of malignant Brenner tumour can be made It has no hormonal activity. Due to the rarity of the tumour, no specific immunohistochemical markers have been identified. Though it resembles transitional cell carcinoma histologically it has better prognosis than TCC. Trials that establish the efficacy of adjuvant chemotherapy are lacking though chemotherapy is recommended to prevent recurrence

CONCLUSION

The histologic appearance of malignant Brenner tumor is similar to that of transitional cell cancer of the ovary and transitional epithelium of the urinary bladder. The mainstay of treatment is surgical resection, but the exact regimen and benefit of adjuvant therapy remain unknown. Due to the rarity of the presentation of tumour and unique features of tumour we have decided to present this article.

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