



ALVEOLAR HYDATID DISEASE IN LIVER: A CASE REPORT.

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INTRODUCTION: Malignant transformation of Mature cystic teratoma is a rare complication, Squamous cell carcinoma being the most common malignancy accounting for 80% of all malignant transformations¹. They occur over a wide age range, mostly in patients two decades older than those with uncomplicated dermoid cysts². SCC arising in dermoid is typically unilateral³. Large tumors usually present with signs and symptoms related to adherence to surrounding structures⁴. Therefore it is often challenging to diagnose an ovarian scc. Most patients present at an advanced stage and have poor prognosis.

We present a case of ovarian Scc arising from Mature Cystic teratoma extending into Rectosigmoid and masquerading as a rectosigmoid growth.

Case Report: A 60-year-old female presented with abdominal pain and rectal bleeding for the past 15 days. Per-abdomen examination showed a large firm abdominal mass. Her hemogram revealed no abnormality, except anemia. Serum tumor markers, i.e., coelomic antigen (CA) 125(=9.27U/ml), CEA(= 2.43ng/ml) alpha-fetoprotein, and beta-human chorionic gonadotropin, were normal.

Computed tomography (CT) scan showed large heterogenous mass lesion measuring 5x 8 cm in the rectouterine pouch, extending into the rectosigmoid junction, infiltrating into the ureter and common iliac vessels and abutting the posterior wall of uterus. Right adenexa reveal 7x4 cm lesion with areas of fat density with few internal septations, suggestive of dermoid cyst. Left ovary was not visualized separately.

MRI shows normal uterus with normal endomyometrial interface and multiloculated cyst in right ovary while left ovary was not visualized.

Lower GI endoscopy showed infiltrative rectal mass ?suggestive of uterovaginal growth infiltrating into rectum.

Colonoscopic biopsy was taken. Histopathological examination showed features of squamous cell carcinoma.

Patient underwent an exploratory laparotomy and TAH BSO with resection anastomosis at rectosigmoid growth with left side DJ stenting with uterero ureteric anastomosis. The specimen was sent for Histopathological examination.

Grossly, there was a diffusely infiltrating growth in the rectosigmoid colon that seemed to arise from the serosal aspect with few perforations in serosa that were likely due to iatrogenic cause. The growth measured approximately 8 x 8 cm, was firm with grey white cut section. The mucosa was grossly unremarkable with only focal ulceration. The regional lymph nodes of rectosigmoid were free of tumor.

The right ovary measured 7x6x 4 cm. Cut section showed multiloculation with cheesy material, suggestive of dermoid cyst.

The left ovary measured 8x4x2 cm. Cut section showed grey white solid area that was totally replacing the ovarian parenchyma. Hair shafts were seen attached focally. Capsule was absent.

Microscopically, sections from the rectosigmoid growth showed features of well differentiated squamous cell carcinoma extending

from the serosa but sparing the mucosa. (Figure 1,2,3,4)

(All the figures included are original)

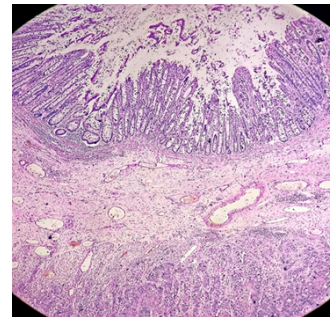


Fig.1

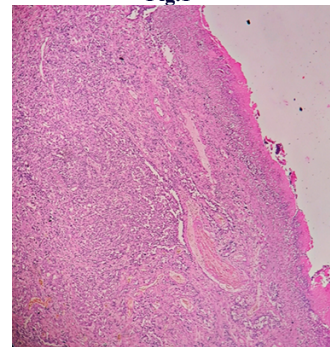


Fig.2

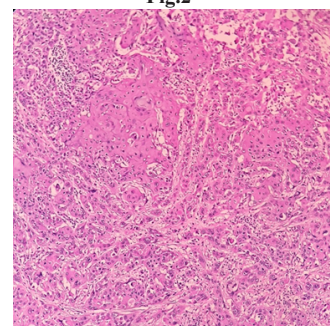


Fig.3

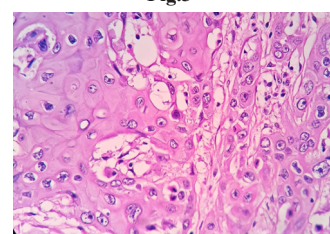


Fig.4

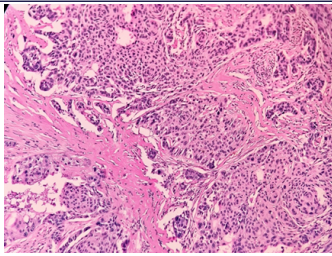


Fig.5

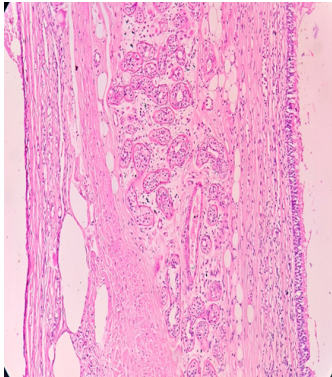


Fig.6

Sections from the left ovary showed features of well differentiated squamous cell carcinoma (Figure 5). Deposits of same tumor were seen in broad ligament and periureteric tissue.

Sections from right ovary showed features of Mature cystic teratoma. (Figure6)

Sections from uterus were histologically unremarkable. Surgical margins were free of tumor.

The patient was deemed to be stage IIB ovarian cancer and was considered for follow up.

DISCUSSION:

Mature cystic Teratoma is the most common ovarian tumor (20-40%) and the most prevalent germ cell tumor with a wide age distribution, 50% occurring in women between 20 and 40 years⁵.

MCT may undergo wide range of complications, development of secondary malignancies being one of them which occurs in 0.17-2% of all MCT^{6,7}.

Squamous cell carcinoma account for 80% of cases of malignant transformation within a dermoid cyst. Other malignancies that may arise from MCT are adenocarcinoma, Sarcomas and Melanoma¹. They occur over a wide age range, mostly in patients two decades older than those with uncomplicated dermoid cysts². In the reported case above, the patient's age is 60 years old. The patient's age is consistent with the usual reported age range of this disease.

SCC arising in dermoid is typically unilateral³. Large tumors usually present with signs and symptoms related to adherence to surrounding structures⁴.

Abdominal pain followed by abdominal or pelvic mass is the most common symptoms. In other cases, various symptoms due to invasion of nearby organs are the presenting complaints, such as gastrointestinal symptoms of constipation or diarrhea, rectal bleeding, or urinary frequency⁸.

In our case, the patient is presented with rectal bleeding and abdominal pain. Tumor size should also be considered in order to predict malignancy, as Kikkawa et al. and Yamanaka et al. asserted that larger tumors with diameter 9.9 cm may be related to increasing risk of malignant transformation^{9,10}. In case we reported, the tumor size is 7cm.

Size >10cm, elevated CEA in women more than 45 years is a predictor of malignancy and imaging may be confirmatory. Tumors markers

(CEA, Ca125), however, may be normal in many cases². Important radiological features supporting malignant transformation include the presence of a solid component that extends transmurally invading the adjacent structures, necrosis, and hemorrhage¹¹.

Grossly, SCC is a large cystic tumor with significant solid component. In one case series by Kido et al., five of the six tumors had an obvious large solid component. Four of the five solid components exhibited transmural extension¹¹.

Tumors confined to the ovary are optimally managed with surgical management and close follow-up¹². Adjuvant chemotherapy or radiotherapy is not beneficial in patients with Stage I or Stage II diseases, but it increases the survival in those with Stage III and Stage IV disease¹³. However, the prognosis of patients with advanced squamous cell carcinoma of the ovary is poor regardless of the treatment received¹⁴.

The prognosis heavily depends on the stage of the disease. Other factors effecting diagnosis are tumor grade, tumor dissemination, cyst-wall invasion, rupture, ascites, adhesion, growth pattern, and vascular invasion^{12,15}.

CONCLUSION:

We conclude that, in postmenopausal patients with colorectal SCC, one should raise the possibility of secondary involvement including metastasis or tumor extension of cervical or vaginal carcinoma and malignant transformation of mature cystic teratoma. And that preoperative diagnosis of SCC arising in the MT of the ovary is challenging. Therefore, an ovarian teratoma in a patient aged >40 years with huge size and/or extensive solid component should raise the suspicion of malignancy and such specimens should be thoroughly sampled. In our cases, the unusual finding of squamous cell carcinoma in the colonic biopsies creates a diagnostic dilemma and the secondaries were taken into consideration.

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