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Surgery

COLLISION TUMOUR OF OVARY- A CASE REPORT

Dr. B. Evangeline Ragaleena Paul

Dr. G. Sailaja

Dr. G. Raja Lakshmi

Dr. V. Aparna

KEYWORDS :

BACKGROUND

A collision tumor is a neoplastic lesion comprised of two or more distinct cell populations that maintain distinct borders without any intermixing. Collision tumors, which are rare but well documented, can be composed of two benign tumors or a benign and malignant tumor or two malignant tumors.

These tumors have been described in other organs such as liver, kidney, brain, lung, stomach, esophagus, thyroid and bone as well but their occurrence in ovary is rare.

Our case is a collision tumor of mature teratoma along with a fibro thecoma. Mature cystic teratoma has been one component in many collision tumors of ovaries that has been reported. A fibro thecoma is a rare tumor of the ovary originating from the gonadal stromal component and are known to be mostly benign. Their occurrence is only 1 to 4%

Clinical Case

A 19-year-old unmarried girl presented with complaint of pain abdomen for 1 week following which she noticed a mass in the abdomen. The mass is single in number, extending from the right iliac fossa toward the midline, about the size of a big ball, associated with intermittent dragging type of pain, which radiates to the right lower back. There are no associated menstrual irregularities, no difficulty in micturition or defecation.

On examination, umbilicus is in midline, inverted. The right hypochondriac, lumbar and iliac quadrants seem to be moving lesser than the other quadrants during respiration.

A single mass of size 5x7 cm felt in the right iliac region with the upper border felt 2cms below and the lower border couldn't be made out. The mass is mobile from side to side and is firm to cystic in consistency.

Tumor markers are evaluated and found to be within normal limits except for CA 125 which is elevated to 48U/mL.

Ultrasound revealed a 12x10cm lesion with both solid and cystic components arising from the right ovary indicating a right ovarian complex cyst.

MRI revealed a large mixed solid-cystic complex lesion of 16x7x15cm noted arising from right adnexa and extending into the periumbilical region.

The lesion shows extensive solid component predominantly in the central region of the cyst. Another thick-walled lesion of 3x2 cm noted adjacent to the larger lesion– f/s/o right complex ovarian cyst, likely mature cystic teratoma of ovary.

Intraoperatively, the larger cyst of size 10x12 cm was excised. The smaller lesion of 3x4cm was found to have ovarian tissue along with tumor mass. This was also excised and both sent for on table frozen section which came out to be a MATURE CYSTIC TERATOMA WITH FIBROTHECOMA OF THE RIGHT OVARY {benign}.

Mature teratoma fibrothecoma

DISCUSSION

The mature cystic teratoma is derived from at least two of the three germ layers, most common {20% incidence}, younger age group, may contain heterogenous tissue, most commonly sebaceous material {adipose tissue}. Rokitansky nodule maybe present- raised protuberance from which majority of hair is formed. Bone and teeth if present are found here. Mature type are almost always benign and recurrence after resection is <10%

The fibrothecoma is benign, solid, derived from sex cord- stromal cells, rare tumours with the characteristics of both fibroma and thecoma {1-4%}, more common in middle aged, recently bimodal peaks. They have fibroblastic stromal cells and luteinized theca like cells. Rarely theca cells secrete oestrogen and present with oestrogenic features and they can rarely land into MEIGS syndrome. Ascites may be seen if tumour is larger than 10cms.

These patients usually present with pain/ mass per abdomen, rarely menorrhagia in case of estrogenic features. The masses are usually large with mean size of 6.8cm. The initial evaluation is by ultrasound but MRI is superior. There is decreased T2 intensity images showing the fibroma part of the tumour whereas the teratoma is seen as T1 hyperintensity and decreased signal on fat sat. The tumour markers can be used though non- specific. CA 125 maybe elevated, like this case. Other markers like HCG and AFP are negative. Surgery is the mainstay of treatment followed by histopathological confirmation. The case is followed up at 1 month and 6 months later to check for convalescence and recurrence

CONCLUSION

Collision tumours are tumours where two histologically different tumours co-exist without intermixing. Collision tumours of ovary are rare and even rarer to have a fibrothecoma component in young age group as the present case. The most accepted theory is the mutation in a common progenitor cell which later divides into two distinct cell types leading to two histologically different tumours. They usually present as large abdominal masses with pain and pressure symptoms and diagnosed by ultrasound. MRI is better and considered gold standard. Tumour markers are non- specific, maybe elevated occasionally. {e.g.: CA 125}

Surgery and total resection of the tumour is the goal. Postoperative histopathology is empirical.

In our case, both are benign tumours, hence no further treatment is

prescribed. The recurrence in mature teratomas is <10% and around 8 to10% in case of fibrothecomas.

If benign, the patients are followed up at 1 month and 6 months later. If malignant, adjuvant chemotherapy is advised.

Overall prognosis is good as they are large and usually identified early on in young age groups. If malignant epithelial cell tumours occur and in cases with advanced age, poor prognosis is expected.

REFERENCES

1. JP Sharan LF Dorothy SR Nayak R Arun B Deepika Collision tumor of ovary: A rare entityInt J Innov Res Dev2014374247
2. B Priyanka D Pranab Bilateral Serous adenocarcinoma of Ovary coexisting with mature cystic teratoma- Case report and review of literatureAnn Pathol Lab Med201522714
3. F Pepe M Panella G Pepe P Panella F Pennisi S Arikian Dermoid cysts of the ovaryEur J Gynaecol Oncol19867318691
4. AK Singh M Singh Collision tumours of ovary: a very rare case seriesJ Clin Diagn Res2014811FD