



A Case of Dermoid Cyst with Tortion

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Introduction

- Dermoid cyst are the most common benign germ cell tumors of the ovary (95%) marked by the presence of mature tissues derived from three germ cell layers- endoderm, ectoderm, and mesoderm.
- They are usually with smooth surface contain sebaceous material, hair, bone cartilage, thyroid tissue and bronchial, mucous are found. The wall is lined by squamous epithelium.
- Dermoid cyst constitutes 97% of teratoma. The tumor is bilateral in about 15-20%.
- Torsion is the most common and rupture is an uncommon complication.
- The chance of malignancy is about 1-2%. Squamous cell carcinoma is the most common.
- 40% of dermoid cyst (2-3) may be present in the same ovary
- Risk of squamous cell carcinoma is common being 2-3%.

Classification Of Germ Cell Tumor

- Teratoma
- Mature cystic teratoma
- Rokitansky's protuberance

Immature teratoma

Monodermal teratoma

Dysgerminoma

- Yolk sac tumor
- Embryonal carcinoma
- Choriocarcinoma

Common tissues in a dermoid cyst

- Mesodermal tissue (fat, bone, cartilage, muscle) -90%
- Endodermal tissue (gastrointestinal and bronchial epithelium, thyroid tissue) -80%
- Adipose tissue 67-75%
- Teeth -31%

Manifestations for diagnosis

- Rokitansky nodule
- Echogenic area usually demonstrating sound attenuation owing to sebaceous material and hair within the cyst cavity
- Multiple thin, echogenic bands caused by hair in the cyst cavity.

Rokitansky Nodule:

- A raised protuberance projecting into the cyst cavity.
- Most of the hair typically arises from this protuberance.
- When bone or teeth are present, they tend to be located within this nodule.

Carcinoid Tumors

- They are uncommon
- May be insular (islet tumors), trabecular or Mucinous.
- They are frequently associated with mature cystic teratoma or Mucinous tumor.

Struma Ovar II

- Composed predominantly of nature thyroid tissue.
- Accounts for 3% of all mature teratomas.
- In rare cases, thyrotoxicosis has been seen as a complication of struma ovarii.

Aims and Objectives

To present a case of Dermoid cyst with torsion in a 55 years old postmenopausal woman.

Methodology

- **Study design**- Hospital based study.
- **Study place** - OBGY, Katihar Medical College.

Case Summary

- 55 years old P8L5 postmenopausal female presented in the emergency with complaints of acute pain in abdomen since 10 days.
- Pain was acute in nature, sudden in onset, dull aching type, non-radiating more in lower abdomen
- She also had complaints of lump in abdomen since 6 months that progressively increased in size.
- Patient also had nausea and vomiting.
- No complains of postmenopausal bleeding.
- No significant past medical or surgical history.

On Examination**Vitals**

- BP- 100/70 mmHg
- PR- 90 /min, Afebrile,
- RR- 14 bpm
- Spo2-98%

General Examination

- Pallor +, No Icterus, cyanosis, clubbing, lymphadenopathy, edema

Systemic Examination

- Chest – B/L clear
- CVS- S1, S2 heard,
- P/A: lump measuring approx. (8*8cms) felt in right iliac fossa tenderness++,margin regular, smooth surface , mobility restricted from side to side and above down.
- P/V: ut-A/v, mobility restricted, fornix full.

Symptoms of teratoma

- Abdominal pain, depending on the size
- Dyspareunia
- Compression

Complications

- Ovarian torsion -3-16%
- Rupture -1-4%
- Malignant transformation -1-2%
- Superimposed infection - 1%

Differential diagnosis

- Blood clot
- Hemorrhagic cyst
- Echogenic bowel
- Perforated appendix
- Pedunculated lipoleiomyoma of uterus
- Ovarian serous or Mucinous cystadenoma.

Treatment

- Goals
- Removal where possible
- Relief of symptoms
- Depends on diagnosis
- Surgical excision
- Chemotherapy
- Follow up

Investigation

- Hb-9.6 gm%, ABO Rh-O positive,

- viral marker: non-reactive,
- Platelet count-1.3 L/dl
- TLC – 11600 /cmm
- Sr. electrolyte: Na – 138, K– 3.4, Cl– 104
- Sr.urea – 24mg/dl ,
- Sr.creat-- 0.7 mg/dl
- SGOT-17 IU/L, SGPT-19 IU/L
- Bilirubin- 0.7 mg/dl.
- Serum alphaprotein (AFP)
- Beta human chorionic gonadotropin (HCG)
- CA 19-9

Operative procedures

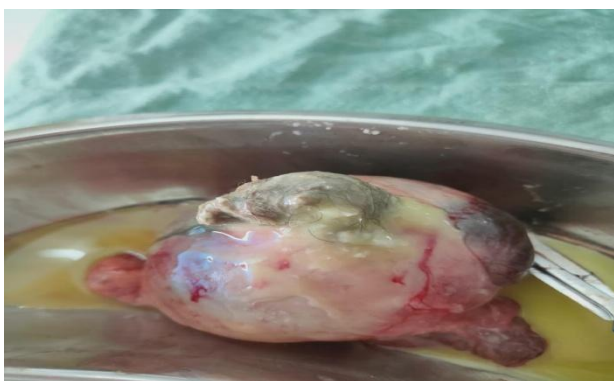
- Under A/S/P laparotomy was done. A large cystic lesion removed at right ovary. Torsion seen around the pedicles. Hemorrhagic spots and necrosed tissues were present. Detorsion was done, due to impaired vascular supply right ovary was beyond salvage.
- Right salpingoophorectomy was done. Hemostasis achieved. specimen sent for HPE.

USG- Dermoid cyst with probability of ovarian torsion.

CT- Complicated large ovarian dermoid cyst with ovarian torsion (right side)

Result

- HPE confirmed the growth as Dermoid cyst.



Discussion

- Dermoid cyst is the most common germ cell tumor and can be asymptomatic in many cases. however, it can sometimes be complicated by ovarian torsion representing a true gynecological and surgical emergency.

Conclusion

- Dermoid cyst with torsion presents as a true gynecological emergency. considering the distress of the patient emergency laparotomy was done.
- In our case the blood flow to the ovary couldn't restored after detorsion as a result ovary was not salvageable. Right salpingoophorectomy was done.

Differential diagnosis

- Ruptured ovarian cyst
- Appendicular lump
- Diverticulitis
- Tubo-ovarian abscess/mass
- Encysted peritonitis

References

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