

INTRODUCTION

- Acute vs chronic pelvic pain various causes depending on gestational age and gynecological history
- Acute pain and vaginal bleeding in early pregnancy
 - B-hCG
 - TVUS
- Other diagnostic tests: speculum examination, urinary analysis, complete blood count, sexually transmitted disease testing, computerized tomography (CT), and hormone assay
- Questionable imaging with TVUS for ectopic pregnancy
 - Need for diagnostic laparoscopy and dilatation and curettage

CASE PRESENTATION

32-year-old gravida 1, para 0000 (G1P0) female patient presented to the ED in 2023 with left lower quadrant abdominal pain and light vaginal bleeding 5 days after positive home pregnancy test. LMP was 4-5 weeks prior.

Medical History: No STI history. Progesterone only oral contraceptive use. Unspecified irregular periods since 2021. Elevated prolactin of 30.2ng/mL in 2021. Normal pap smear and gyn exam in 2021. Pelvic US 2021 showed left hydrosalpinx. Hysterosalpingogram 2022 showed patent fallopian tubes. Started planning for pregnancy with husband in 2022.

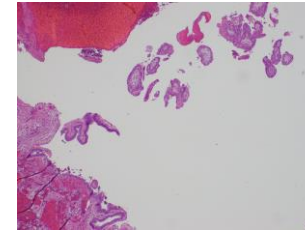
Diagnostic Testing in the ED:

- B-hCG 2317.20mIU/mL
- TVUS: tiny cystic focus in fundal endometrium that may represent an early intrauterine gestational sac; pseudogestational sac and spontaneous abortion in progress or occult ectopic pregnancy cannot be excluded; right ovary measuring 2.6 x 1.9 x 1.9cm with probable corpus luteum in right ovary; left ovary 9.3 x 5.5 x 9.8cm with 4.2cm cystic focus in left ovary and 7.7cm left ovarian lesion suspicious for endometrioma

THE QUINTET

Ruptured Ectopic Pregnancy with Hemoperitoneum:

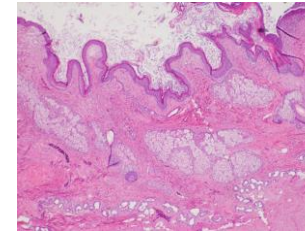
- left ectopic pregnancy was confirmed with placental-like tissue being expelled from the fimbriated end and a hemoperitoneum of approximately 200 cc's
- left salpingectomy performed



Fallopian tube epithelium with chorionic villi and blood present

Right Ovarian Torsion:

- right ovarian torsion was confirmed to be twisted x 4
- Detorsion was performed



Ovarian serosal surface with the dermoid cyst consisting of keratinaceous debris, squamous epithelial, sebaceous glands, hair follicles and eccrine glands.

Right Ovarian Dermoid Cyst:

- right ovarian dermoid cyst of approximately 6-7cm consisting of keratinaceous debris, squamous epithelial, sebaceous glands, hair follicles and eccrine glands
- upon dissection, the cyst ruptured and a cystectomy was performed

Leiomyomata (fibroids):

- multiple subserosal uterine fibroids visualized
- no interventions and lost to follow up

Endometriosis of the Posterior Cul-de-sac:

- small endometriotic implants noted on the posterior cul-de-sac
- no interventions and lost to follow up

DISCUSSION

Ruptured Ectopic Pregnancy: 1-2% of all pregnancies are ectopic, and 20% of ectopics rupture. Pt sx: lateral lower quadrant pain and vaginal bleeding. Pt risk factors: hx of hydrosalpinx and endometriosis.

Right Ovarian Torsion and Dermoid Cyst: Incidence of ovarian torsions is 2-5%; a dermoid cyst is found in 25% of all ovarian torsions. Pt sxs: lateral lower quadrant pain and vaginal bleeding (most likely from the ectopic pregnancy). Pt risk factors: pregnancy although ectopic was left sided and right dermoid cyst.

Leiomyomata (fibroids): Estimated frequency of fibroids is 50-80% of the female population. Pt reported no sxs. Pt risk factors: nulliparity and lifetime hormonal changes.

Endometriosis: Endometriosis affects 10-15% of females of reproductive age. Pt reported no sxs. Pt risk factors: nulliparity and hx of abnormal menstrual cycles.

CONCLUSIONS AND REFERENCES

- Although rare, there is a chance of simultaneous multiple acute and chronic pelvic pathologies occurring in a single patient
- Every patient experiences symptoms uniquely and may have underlying/internal structural abnormalities that have yet to make themselves known
- Laparoscopy was imperative given the unclear TVUS results
- Addressing the patient's symptoms and acting on questionable imaging results with the next surgical step may have just saved this patient's reproductive organs and life

References:

