The background is a blue gradient with several overlapping, semi-transparent circular shapes of varying shades of blue, creating a layered effect.

General Surgery Complications in Pregnancy

Objectives

- Explore some clinical presentations of common surgical problems in pregnancy
- Compare these to the non-pregnant patient

Some of the Problems

- Acute appendicitis
- Biliary tract disease
- Trauma
- Breast cancer
- Hernias
- Acute thrombosed external hemorrhoid

Acute appendicitis

- Presentation

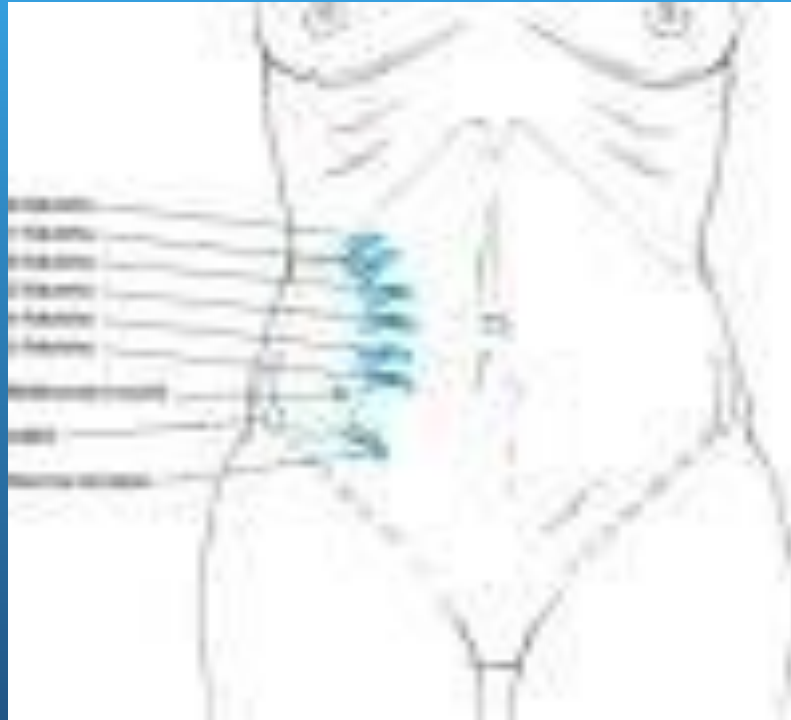
Comparisons

Physical examination

- Diagnosis
- Treatment

Acute appendicitis

- Most frequent surgical emergency 1 in 1500 to 1 in 2000 incidence
- More frequent in first two trimesters
- Often early symptoms are non-specific
- Shift in pain to RLQ is not consistent, depending on the stage of pregnancy



Physical Examination

- Rebound tenderness and guarding may be present, but less often
- Adler's sign may be helpful

Diagnosis

- Often difficult
- WBC
- Urinalysis
- Ultrasound may be helpful
- Laparoscopy

Treatment

- Usually appendectomy

Laparoscopic vs open

- Occasionally delayed appendectomy, and treatment of phlegmonous appendicitis, with antibiotic
- Risks: Premature onset of labour- 10 - 15%

Fetal loss 3-5% (20% advances appendicitis or perforation)

Maternal mortality 1%

Biliary Tract Disease

- Biliary colic
- Acute cholecystitis
- Choledocholithiasis
- Gallstone pancreatitis

Biliary Tract disease

- Similar presentations to the non-pregnant patient
- Bloodwork may be helpful
- Ultrasound usually confirms the diagnosis

Treatment, cholelithiasis

- Usually conservative treatment
- If Choledocholithiasis is present, ERCP may be necessary, with shielding of the fetus
- If sepsis is present, operation may become necessary
- If managed conservatively, successfully, the patient will require cholecystectomy later

Acute Cholecystitis

- Treated conservatively with antibiotics
- With resolution, laparoscopic cholecystectomy after delivery
- If no resolution, or recurrence of problem, cholecystectomy during pregnancy

Treatment of pancreatitis

- Again, conservative management is usually successful
- If complications arise, further imaging may become necessary to manage them successfully (eg. Abscess, pseudocyst)
- Cholecystectomy will be necessary at a later date

Trauma

- Anatomic and physiologic changes of pregnancy influence evaluation of the patient
- Primary survey and resuscitation remains the same, except remembering if possible to transport and evaluate the patient on her left side.
- Even apparent minor injuries require obstetrical and surgical evaluation

Trauma

- Potential complications:

Uterine rupture

Abruptio placentae

Premature labour

Isoimmunization

Breast Cancer

- Most common malignancy in pregnancy (19%)
- Associated with worse outcome overall compared to non-pregnancy associated breast cancer
- Diagnosis often delayed, for several reasons

Breast cancer

- Mammogram is safe
- Biopsy is safe
- Beware the inflammation which does not resolve

Breast Cancer

- Usually treatment is a modified radical mastectomy
- Radiation therapy is contraindicated during pregnancy, so lumpectomy is only indicated if radiation can start after delivery
- Chemotherapy is relatively safe during 2nd and 3rd trimesters
- Treatment plans are done on an individual basis, using team approach

Hernias

- Common in pregnancy
- Usually umbilical or inguinal
- Present in the same way as for the non-pregnant patient
- Very unusual to get incarceration

Hernias

- Treatment

Repair if persistent after pregnancy and are symptomatic

Repair is usually performed with mesh now, and thus not usually done during c-section

Thrombosed External Hemorrhoid

- Common!
- Often not recognized
- Easily treated surgically

Appearance



Treatment

- If diagnosed within 72 hours - excision Instant relief!
- If diagnosed later than 72 hours - conservative management, with Sitz baths and stool softeners

