Gastrointestinal tract and peritoneal tuberculosis

1-Tuberculous peritonitis:

- **Route of infection**:
- 1-Direct spread from tuberculosis of intestine, mesenteric lymph nodes and fallopian tubs.
- 2-Lymhatic spread from tuberculosis of lung and pleura
- 3-Haematogenous spread usually following reactivation of foci from a primary lung focus.
- **Types**
- 1-Wet or ascetic type
- 2-Dry or adhesive type

Clinical picture:

- Symptoms develop insidiously over weeks or months
- Abdominal pain and distension (abdominal pain may be aching, dull, vague or cramp-like and may be generalized or localized)
- Weight loss, anorexia and vomiting, fever.
- On examination: ascites, palpabe mass, hepatomegaly, slenomegally, intestinal obstruction may occur

Investigations:

- **1-Abdominal sonar**
- **2-Aspiration of ascetic fluid** which is straw-colored exudates with predominance of lymphocytes, ascetic fluid protein >2.5g/L, ascetic lactate dehydrogenase greater than 90 IU/L
- **3-Direct smear** and culture of peritoneal fluid.

- **4-Peritoneal biopsy** is best performed laparoscopically or by minilaparotomy.
- **-Chest radiograph** may reveal evidence of past or present pulmonary tuberculosis

2-Tuberculous enteritis:

- The gastrointestinal tract may be involved in four mechanisms:
- 1-Swallowing infected sputum (M.tuberculosis)
- 2-Ingestion of contaminated milk (M.bovis)
- 3-Haematogenous spread
- 4-Direct extension from adjacent organs

Clinical picture:

- Abdominal pain, weight loss,fever,weakness,nausa,vomiting,anorexia,
- abdominal distension,constipation,diarrhea,night sweats,amenorrhea,hemorrhage.Abdominal pain may be generalized or localized to right iliac fossa.
- Palpable mass, tenderness.
- The classic (doughy abdomen) due to extensive intraabdominal fibrous adhesion and inflammation is uncommon

NB-acute abdominal emergencies diagnosed as acute appendicitis or intestinal obstruction

Investigations:

- Stool culture and direct smear.
- Abdominal sonar
- Tuberculin skin test
- Barium studies of small intestine and colon
- Chest radiography
- During operation

- Computerized tomographic scanning may demonstrate lymphadenopathy, hepatosplenomegally, bowel involvement or intrasplenic or intrahepatic masses.
- Colonoscopy.
- Exploratory laparotomy
- PCR assay on endoscopic biopsy specimen

Genitourinary tract tuberculosis

- Genitourinary tract tuberculosis results from hamatognous spread to the kidney, with subsequent spread to the ureters, bladdr, prostate, seminal vesicles, epididymes and female genital tract

Clinical picture:

- Commonly, patients present with frequency, dysuria, loin pain, nocturea and haematurea.
- Scrotal swelling due to epididymo-orchitis.
- Haematospermia
- Positive urine culture
- Perinal sinuses, scrotal sinuses, beaded vas deferens or

- indurations of the prostate or seminal vesicles.
- Wight loss, fever, asthenia.
- Female genital tract tuberculosis presents with infertility, menorrhagia or pelvic inflammatory disease.
- Palpable adnexal mass on pelvic examination

Investigations:

- An intravenous pyelogram.
- Urine—direct smear and culture for AFB (early morning urine specimens)
- Chest film
- Tuberculin skin test

- Female genital tract tuberculosis is usually diagnosed following the histological or microbiological examination of endometrial curetting.

Cutaneous tuberculosis:

- Lupus vulgaris: with apple jelly nodules and scaly plaques.
- Diagnosis of TB of skin is made by pathological and bacteriological examination of biopsy.

THANK YOU