



SNS COLLEGE OF NURSING
Saravanampatti (po), Coimbatore.

DEPARTMENT OF NURSING

COURSE NAME : BSC (NURSING) II YEAR

SUBJECT : MEDICAL SURGICAL NURSING

UNIT: IV: DISORDERS OF GASTRO INTESTINE SYSTEM

TOPIC :PERITONITIS



INTRODUCTION



- Intra-abdominal infections are the main challenge to clinical practice
- Major cause of post operative morbidity following abdominal surgery
- Most frequent cause surgical icu admission
- Differ from infections elsewhere
- antibiotic resistance among enteric pathogens has evolved globally .



ANATOMY OF PERITONIUM



➤ Peritoneal cavity

- the largest cavity of human body
- lined by peritoneum

➤ Peritoneal membrane

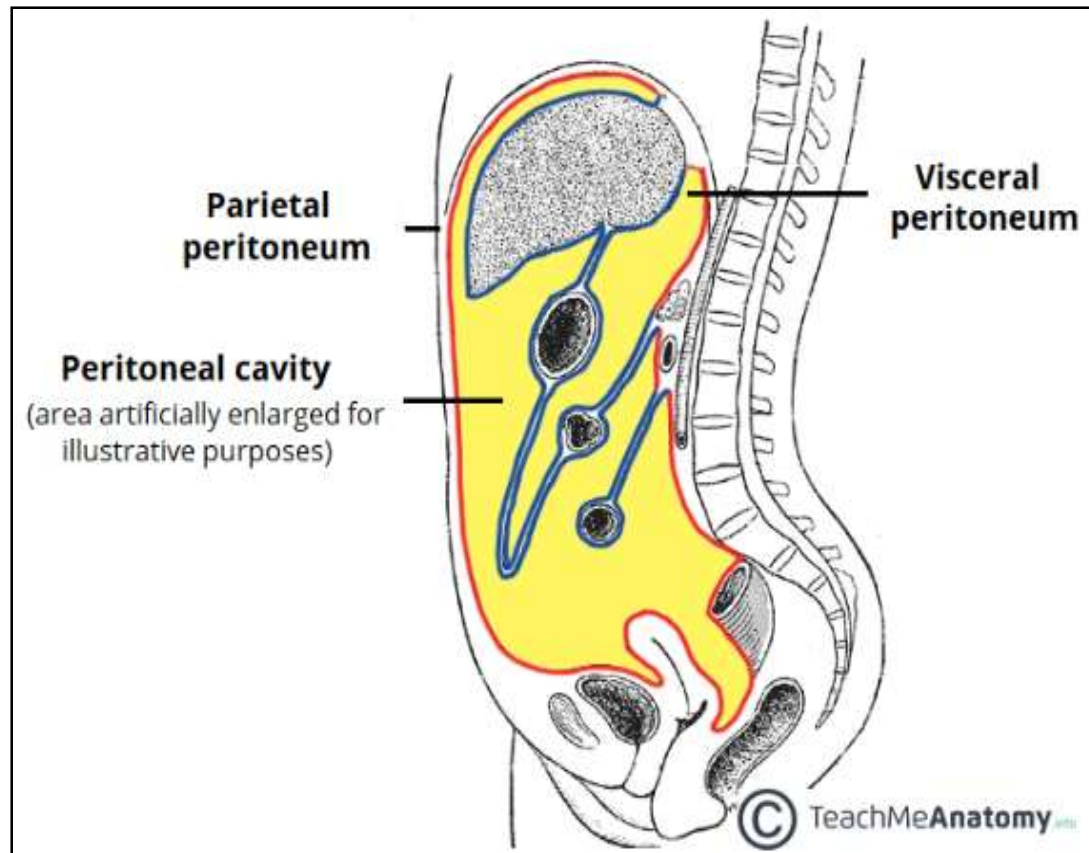
- mesothelium & fibroelastic tissue, visceral layers
- parietal layer , exudation & absorption
- so used in peritoneal dialysis.

➤ **Peritoneal fluid**

- Amount is less- 100 ml
- clear/pale yellow , viscid
- from mesothelial cells
- contain lymphocytes and leucocytes
- lubricating function. pathology alter the quality and quantity of peritoneal fluid.

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- Lubrication
- Absorption and exudation
- Pain perception
 - parietal peritonium is more pain sensitive and is localised.
 - visceral peritonium is less sensitive and pain sensation will be poorly localised.
- Inflammation and immune response.

DEFINITION

Peritonitis is an inflammation of the peritoneum, the serous membrane that lines part of the abdominal cavity.





TYPES OF PERITONITIS



- Infected peritonitis (localized or generalized infected peritonitis) or none infected peritonitis
- Primary or secondary peritonitis

TYPES OF PERITONITIS

- **Primary peritonitis** is caused by the spread of an infection from the blood and lymph nodes to the peritoneum.
- **Secondary peritonitis** is the *more common type of* peritonitis, happens when the infection comes into the peritoneum from the gastrointestinal or biliary tract

ETIOLOGY

Infected peritonitis:

A. Generalized Infected peritonitis:

1. Perforation of part of the gastrointestinal tract includes:

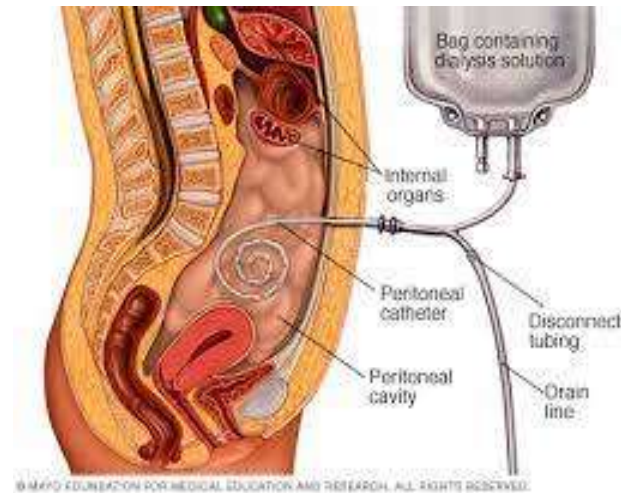
- Perforation of the distal esophagagus.
- perforation of the stomach as peptic ulcer, gastric carcinoma.

ETIOLOGY

2. Disruption of the peritoneum, includes trauma, surgical wound, continuous ambulatory peritoneal dialysis, and intra-peritoneal chemotherapy.
3. Direct entry through an operative or traumatic wound.

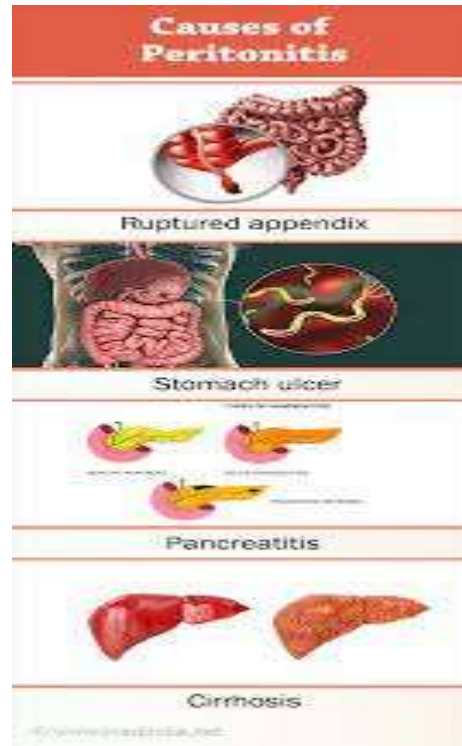
ETIOLOGY

4. Intra-peritoneal dialysis predisposes to peritoneal infection
5. Though blood spread in cases of septicemia and pyrexia but is rare.



ETIOLOGY

B. Systemic or localized infections (such as tuberculosis) may rarely have a peritoneal localization.



ETIOLOGY

II-Non-infected peritonitis

1- Leakage of sterile body fluids into the peritoneum, such as blood, gastric juice (e.g., peptic ulcer, gastric carcinoma), bile (e.g., liver), urine (pelvic trauma), pancreatic juice (pancreatitis).

ETIOLOGY

II-Non-infected peritonitis

2. Sterile abdominal surgery under normal circumstances, causes localized or minimal generalized peritonitis through a foreign body reaction and/or fibrotic adhesions).

PATHOPHYSIOLOGY

Bacterial proliferation occurs



Edema of the tissues results and exudation of fluid develops in a short time



Fluid in the peritoneal cavity becomes turbid with increasing amounts of protein, white blood cells, cellular debris, and blood. The immediate response of the intestinal tract is hyper motility, followed by paralytic ileus with an accumulation of air and fluid in the bowel.



Later on, the exudate becomes creamy and suppurative. It may be spread to the whole peritoneum

- Generalized abdominal pain
- Rebound tenderness
- Abdominal rigidity
- Nausea and vomiting
- Fever
- Increased white blood cell count

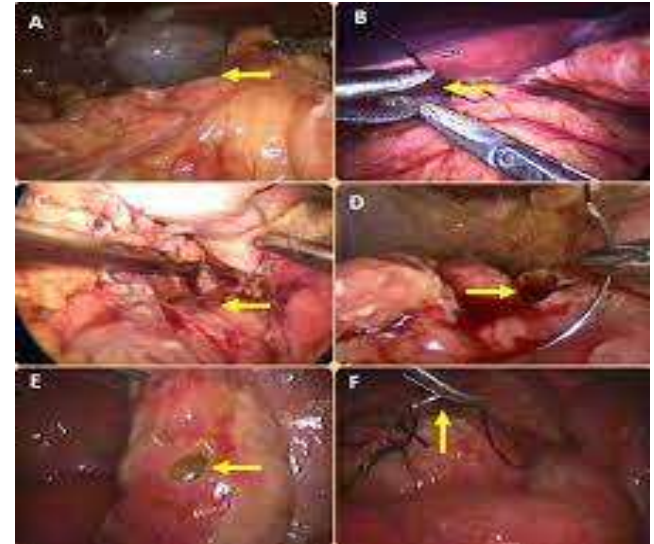
- Tachycardia
- Tachypnea
- Abdominal distention
- Paralytic ileus
- Altered bowel habits
- Muscular rigidity
- Anorexia



- History collection
- Physical examination
- Complete blood count
- Serum electrolytes studies
- Abdominal x-ray
- CT scan
- USG
- Peritoneoscopy
- Abdominal paracentesis

- Medical Management
 - Analgesics
 - Antiemetics
 - Administer IV fluids
 - Antibiotics
 - Parenteral Nutrition
 - Oxygen Therapy

- Surgical Management
- Removing the Infected Material
Correction of causes



The surgery has aimed to direct towards excision, resection, with or without anastomosis, repair and drainage of abscess

Nursing Management

- Check the vital signs
- Assess the GIT functions
- Report the nature of pain and its location in the abdomen
- Administer the medications as prescribed by doctor.
- Appropriate positioning of patient to maximize comfort and relieve the pain.

Nursing Management

- Accurate recording of intake, output and central venous pressure and assist in calculating fluid replacement.
- Administer the IV fluids to replace fluid loss
- Increase the fluid and fluid intake gradually and reduction in parenteral fluid
- The nurse must observe and record the character of drainage postoperatively.



Assessment



- Define peritonitis
- List down the Etiological factors
- Enumerate the clinical manifestation
- Discuss about the management



References



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