RAMA UNIVERSITY

www.ramauniversity.ac.in

FACULTY OF NURSING

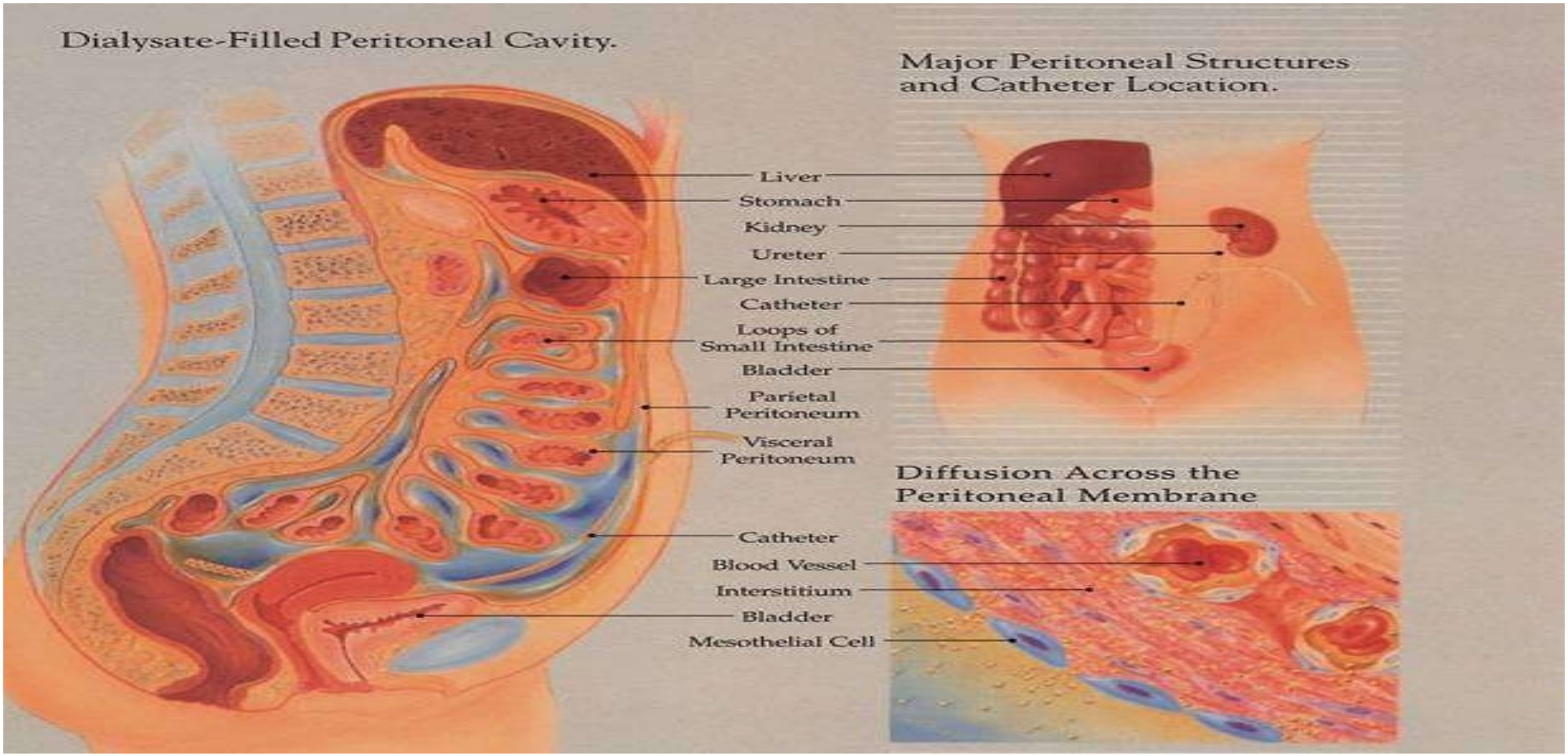
Peritonitis

BY:-
Kalpana Devi
Nursing Tutor
MSN Department
Rama College Of Nursing

FUNCTION OF PERITONEUM

- Peritoneum is the largest serous membraneof the body.
- Consist two part:
- 1.Parietal layer:Part attaches to cavitywall.
- 2.Visceral layer:Part that covers and attaches to the organ inside this cavity.
- Each layer consist of areolar connective tissue covered by mesothelium(simple squamous epithelium)
- Mesothelium secretes serous fluid(watery lubricating fluid that allowed organ to glide easily over one and other or to slide again the wall ofcavities).

The peritoneal membrane is a semi-permeable membrane that lines the abdominal wall (parietal peritoneum) and covers the abdominal organs (visceral peritoneum).



DEFINITION

- **Peritonitis** is an inflammation (irritation) of the peritoneum, the thin tissue that lines the inner wall of the abdomen and covers most of the abdominal organs.

CAUSES AND RISK FACTOR

- **Medical procedures, suchas peritoneal dialysis.** Peritoneal dialysis uses tubes (catheters) to remove waste products from your blood when your kidneys can no longer adequately do so. An infection may occur during peritoneal dialysis due to unclean surroundings, poor hygiene or contaminated equipment.
- **A ruptured appendix, stomach ulcer or perforated colon.** Any of these conditions can allow bacteria to get into the peritoneum through a hole in your gastrointestinal tract.

- **Pancreatitis.** Inflammation of your pancreas (pancreatitis) complicated by infection may lead to peritonitis if the bacteria spread outside the pancreas.
- **Diverticulitis.** Infection of small, bulging pouches in your digestive tract (diverticulitis) may cause peritonitis **if one of the pouches ruptures,** spilling intestinal waste into yourabdomen.
- **Trauma.** Injury or trauma may cause peritonitis by allowing bacteria or chemicals from other parts of your body to enter theperitoneum.Eg:accident.

SIGN AND SYMPTOM

- Abdomen painful
- Abdominal distention.
- Fever and chills
- Passing few or no stools or gas
- Excessive fatigue
- Passing less urine
- Nausea and vomiting

DIAGNOSTIC TEST

- Physical exam.
- Peritoneal fluid analysis.(Using a thin needle,doctor may take a sample of the fluid in peritoneum (paracentesis)
- Blood tests.(TWBC)
- Imaging tests (Abdominal X-ray)

TREATMENT

- **Antibiotics** are usually administered intravenously, but they may also be infused directly into the peritoneum.Example:Ampicillin.

- **Surgery**(laparotomy) is to correct any gross anatomical damage that may have causedperitonitis

COMPLICATION

- A bloodstream infection (bacteremia).
- An infection throughout your body (sepsis). Sepsis is a rapidly progressing, life-threatening condition that can cause shock and organ failure.

PREVENTION

- Wash hands, including underneath fingernails and between fingers, before touching the catheter.
- Clean the skin around the catheter with an antiseptic every day.
- Talk with dialysis care team about proper care for peritoneal dialysis catheter.

NURSING CARE PLAN

- Nursing diagnosis:
- Deficient Fluid Volume related to Fluid shifts from extracellular, intravascular, and interstitial compartments into intestines or peritoneal space.

- Expected Outcome:
- Client will get enough fluid balance.

Nursing intervention with rationale:

- 1. Monitor vital signs, noting presenceof hypotension (including postural changes), tachycardia, tachypnea, and fever. Measure central venous pressure (CVP) if available.
- Rationale: Aids in evaluating degree of fluiddeficit, effectiveness of fluid replacement therapy, and response to medications.

- 2.Observe skin and mucous membrane dryness and turgor. Note peripheral and sacral edema.

- Rationale: Hypovolemia, fluid shifts, and nutritional deficits contribute to poor skin turgor and taut edematous tissues.

- 3.Change position frequently, provide frequentskin care, and maintain dry, wrinkle-free bedding.
- Rationale: Edematous tissue withcompromised circulation is prone to breakdown.

- 4.Maintain NPO status with NG or intestinal aspiration.
- Rationale: Reduces vomiting caused by hyperactivity of bowel; manages stomach and intestinal fluids.

- 5.Measure urine specific gravity.
- Rationale: Reflects hydration status and changes in renal function, which may warn of developing acute renal failure in response to hypovolemia and effect of toxins. Note: Many antibiotics also have nephrotoxic effects that may further affect kidney function and urine output.

THANK YOU