WHAT IS IT?
■ The peritoneum is a serous membrane covering the abdominal organs. It consists of a closed sac containing a small amount of serous fluid.
■ Peritonitis is an inflammation of the peritoneum caused by contamination of the abdominal cavity. The inflamed peritoneum incites an increase in serous fluid production. This becomes infected as a result of the bacteria present. Toxins are absorbed from the peritoneum and large amounts of fluid are lost into the peritoneal cavity leading to the complications listed below.
■ Untreated, it is usually fatal.

CAUSES
Peritonitis is caused by chemical or bacterial contamination:
■ Chemical contamination may result from acid, bile or enzymes (for example from a perforated duodenal ulcer or a perforated gall bladder) or blood (for example in an ectopic pregnancy);
■ Bacterial contamination may be caused by the rupture of a digestive tract structure (for example small bowel perforation in Crohn’s disease) or traumatic wounds.

SIGNS AND SYMPTOMS
■ Pain typically has a sudden onset, is initially localised and worsens on movement.
■ Tachycardia.
■ Tachypnoea.
■ Low blood pressure.
■ Dehydration.
■ Abdominal distension. Eventually absent bowel sounds.
■ Vomiting.
■ Pyrexia.
■ Weakness.

COMPLICATIONS
Complications of peritonitis can include:
■ Abscesses;
■ Adhesions;
■ Septicaemia;
■ Paralytic ileus;
■ Organ failure.

INVESTIGATIONS
■ Medical assessment.
■ X-ray.
■ Full blood count.
■ Electrolytes.
■ Urea.
■ Creatinine.
■ Serum amylase.

TREATMENT
■ Specific intervention will depend on the underlying cause.
■ Rehydration with intravenous fluids.
■ Urinary catheterisation.
■ Nasogastric tube insertion.
■ Possible central line insertion.
■ Analgesia/antiemetics.
■ Peritoneal lavage.
■ Possible admission to a high dependency unit for close monitoring.
■ IV antibiotics.
■ If the patient continues to remain pyrexial, tachycardic and in pain, an abdominal abscess should be suspected as a complication.

NURSING IMPLICATIONS
■ Monitoring of patient’s vital signs.
■ Monitoring of patient’s fluid balance.
■ Analgesia and antiemetics.
■ Preparation/education of patient ahead of abdominal surgery.
■ Alleviation of patient’s anxiety.

REFERENCES


RESEARCH STUDIES
BMJ’s Clinical Evidence: http://bmj.com/search.dtl

PUBMED:

Bilophila wadsworthia bacteria are implicated in peritonitis