



Diverticular Disease of the Colon

DEFINITION

Consists of pockets/weaknesses in the colonic wall, with protrusion of the inner lining (mucosa) through small defects in the muscle layer to form small pouches known as diverticula.

PATHOLOGY

Considered a “false” diverticulum, rather than “true” in that the protrusion does not involve the full thickness of the bowel wall, only the thin inner lining (mucosa). The defects in the circular muscle of the bowel correspond with the point of entry of the nutrient vascular supply to the muscle. Typically involves the sigmoid (95%) and to a lesser extent the remainder of the colon. Isolated caecal diverticulosis is a separate entity.

PATHOGENESIS

Known as “pulsion” diverticular, occurring due to increased pressure within the lumen of the colon. Associated with dysmotility of the bowel wall. This is in contrast to “traction” diverticula seen in relation to hollow muscular organs elsewhere in the body. General and environment factors pertain, the latter associated with refined foods and a low-fibre diet.

DIVERTICULOSIS

The clinical entity of non infected diverticular disease, often asymptomatic (80%), detected on imaging studies or colonoscopy. Diverticulosis occurs in 40% of a westernised society over the age of 50. The condition may present with pain on the left side of the abdomen, and symptoms similar to those of an IBS. Management of the condition requires a colonoscopy to exclude malignancy. Treatment is directed at diet, although the condition cannot be reversed.

DIVERTICULITIS

The infective entity of the disease presenting with pain and symptoms of a systemic infection. May require hospitalisation for intravenous antibiotics. Occurs due to debris occluding the lumen of one of more diverticula, leading to impaired drainage of the normal mucoid secretion within the diverticulum, and subsequent infection. Caecal diverticulitis may have the clinical findings of acute appendicitis.

COMPLICATIONS OF THE DISEASE

PERFORATION OF THE COLON

Presents with peritonitis, diagnosis confirmed on CT scan. Unless “sealed off” and localised, requires urgent surgery to drain abscesses and evacuate sepsis and excise the diseased segment, usually with a temporary colostomy. The condition is most frequently seen in the elderly, and in patients who are immuno-compromised eg. Diabetes mellitus, chronic medical disease, requirement of Cortisone.

DIVERTICULAR DISEASE OF THE COLON (CONT.)

COMPLICATIONS OF THE DISEASE (CONT.)

BLEEDING

Common in elderly patients, often precipitated by anti-platelet agents eg. Aspirin. Usually settles with hospitalisation, but may recur. Blood transfusion may be required.

STRICTURE FORMATION

Due to recurrent severe infections with healing by fibrosis, leading to occlusion of the colon and necessitating surgery.

FISTULAE

Perforation into the bladder, vagina, or other intraperitoneal structures, requiring elective surgery.

CONCLUSION

Diverticulosis is a benign condition of the colon, particularly prevalent in western societies. A colonoscopy or Barium enema is required to confirm the diagnosis and in particular to exclude more sinister colorectal pathology. Diverticulitis and its complications may require hospitalisation and surgical treatment. However the overall management of the disease is conservative.