

Digestive system disease

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PEPTIC ULCER DISEASE Ulcer generally is defined as a breach in the mucosa lining of the alimentary canal extending from the muscularis mucosa down into the sub-mucosa or deeper structures. An ulcer is said to be acute when it is limited to the muscularis mucosa while it is said to be chronic when it involve the sub-mucosa layers of the digestive system. Peptic ulcer disease is usually about 4 cm in diameter occurring in the following part of the digestive system: lower esophagus, stomach, 1st part of duodenum, sometimes it can occur in some ectopic sites like jejunum, and meckel diverticulum

AETIOLOGY AND PATHOPHYSIOLOGY. Many factors has been attributed to this disease, the most common cause is an organism called *Helicobacter pylori*, a spiral-shaped motile flagellated bacterial which resides in the stomach. Its presence induced an intense inflammatory and immunogenic response. It also secrete many substances that affect the normal function of the stomach which include urease production, which breaks down urea to toxic compounds that affect the mucosa the organism also secrete enzymes like peptidase, lipase, mucinase that digest the protective surface of the stomach and duodenum.

Moreover, when the mucosa of the duodenum are exposed to the acid been produced in the stomach then they may be breached. Also, prostaglandin produced by the stomach must be in balanced form i. e. equal amount of PGE2 and PGE1. Any increase in one without increase in the other will result in ulceration of the stomach mucosa. Some drugs have also been indicated in the development of the diseases, drugs like non-steroidal anti-inflammatory drugs (NSAID), they cause this disease by blocking the

production of the protective prostaglandin, and a good example of such drugs is aspirin.

Many predisposing factors have also been recognized some of which are cigarettesmokingwhich has been taught to inhibit bicarbonate formation, it also inhibit the prostaglandin formation. Secondly, stressalso predisposes an individual to the disease. Whenever an individual is suffering from the disease they always present with dyspepsia (commonly called upset stomach characterized by epigastric pain) there is nocturnal pain, nausea, sometimes heart burn. These symptoms are always on and off and long standing.

Sometimes some patients presents with the complication of the disease which include perforation: the stomach or the duodenum might be perforated so that the content will pour into the peritoneum causing acute abdomen, heamatemesiis (vomiting of blood), haematochezia (passing of bloody stools) other complication include peritonitis, cancer development. Hemorrhagic complication developed as a result of erosion of the blood vessels by the acid or the secretion from the causative organism. Diagnosis

This is done by proper investigation of the cause of the disease. Upper gastro intestinal endoscopy is usually carried out, barium meal is needed. For detection of the bacteria fecal antigen test of urea breath test is always carried out. Treatment The disease is usually treated with anti ulcer drugs which are acid neutralizing drugs, acid reducing agents, cytoprotective agents, and anti H. pylori agents. Examples of commonly used drugs are antacids, cimetidine, omeprazole and sucralfate