

I. INTRODUCTION

The term volvulus is derived from the latin word "VOLVERE" meaning to twist. The current definition of volvulus according to Dorland's Medical Dictionary is intestinal obstruction due to knotting or twisting of the bowel (Carlisle and Hayes, 1967).

Volvulus is a form of intestinal obstruction which results from a twisting of the bowel upon itself. The twisting action causes a block in the intestinal tract which results in a closed loop obstruction within the limits of the twisted bowel, and an open loop obstruction proximal to the twist. In the earliest stages of volvulus, there may be only obstruction to intestinal continuity, but as the twist persists, or as it twists to an even greater degree, there will be interference with the blood supply to all the bowel involved in the process, and the prognosis will deteriorate significantly (Isidor, 1976).

The incidence of volvulus has interesting geographic variations. The incidence is low in the United States, England, Canada, Germany, and Finland, but high in Russia, Iran, India and Certain parts of Africa (Gulati et al., 1973).

In Africa and Middle Eastern countries, acute volvulus of the sigmoid colon is four times as common as in Western countries, with a significant mortality. The majority of patients are elderly (Anderson & Lee, 1981).

Volvulus accounts for approximately 3 to 5 percent of intestinal obstructions and slightly less than 10 percent of colonic obstruction (Eisenstat et al, 1977).

Volvulus of nearly all portions of the gastrointestinal tract have been observed. Colonic volvulus is seen most frequently in the sigmoid and next most frequently in the caecum. Transverse colon volvulus is exceedingly rare and constitutes less than 4 percent of all reported colonic torsions (Budd et al., 1977).

Volvulus neonatorum due to malrotation is a rare cause of mechanical bowel obstruction in infancy (Dott, 1923; Ornstein and Lund, 1981).

The twisting of the intestine occurs around its mesenteric axis, producing a closed loop type of obstruction, this may take either a subacute or recurrent form, or may constitute an acute fulminating type if there is tight compression of the blood vessels in the affected mesentery. The rotated loop of gut then becomes rapidly and immensely distended. The gut wall becomes oedematous and discoloured

and if the acute obstruction is not promptly relieved, gangrene and perforation supervene, leading to a spreading and often fatal peritonitis (Maingot, 1974).

Volvulus of the stomach, spleen, gallbladder, small bowel, hepatic and splenic flexures, has been reported, (Eisenstate et al., 1977).

The aetiology of volvulus has never been established, though a number of factors have been reported to play a role in its development. In addition to the long mesentery, various authors have suggested the importance of chronic constipation, a diet high in roughage, mesenteric and other adhesions and the tendency of the bowel to move in response to its heavy contents and thus cause torsion. There is a higher incidence in males and in inmates of mental institutions (Isider, 1976).