



ROLE OF OCTREOTIDE IN ENTERO-CUTANEOUS FISTULA- A PROSPECTIVE STUDY

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ABSTRACT Octreotide is a octapeptide that mimics natural somatostatin pharmacologically. It exerts Inhibitory effects on gastrointestinal secretion and motility thus considered, useful in management of gastrointestinal fistula. The half life of octreotide is 113 minutes which allow intermittent (three times daily) subcutaneous dosing schedule for the treatment of fistula. The main focus of this review is to know the use of octreotide in management of enterocutaneous fistula.

KEYWORDS : Octreotide, high output, low output, enterocutaneous fistula.

INTRODUCTION

Entero-cutaneous fistula are abnormal communications between the skin and gastro-intestinal tract. More than 75% of entero-cutaneous fistula can occur as a complication of surgery, whereas about 15-25 % result from abdominal trauma or occur spontaneously in relation to cancer, irradiation, inflammatory bowel diseases, ischaemic or infective condition. Post-operative causes of entero-cutaneous fistula are due to :

1. Disruption of anastomosis
2. Inadvertent enterotomy : occur specially in patients with adhesions, when dissection can cause multiple serosal tears and occasional full thickness tear.
3. Inadvertent small bowel injury occur during abdominal closure especially after ventral hernia repair.

Entero-cutaneous fistula is a common condition in most general surgical wards. Mortality has fallen significantly since the late 1980s from as high as 40-65 % to low as 5-20 %. Even so, mortality is still high in range of 30-35 % in patients with high output fistula. The strategies for management of entero-cutaneous fistula include nutritional support, correction of electrolyte imbalance, recognition and treatment of sepsis.

MATERIAL AND METHODS :

We reviewed the charts of all patients who underwent inpatient treatment at JLN Medical college and Hospital, Bhagalpur during the periods from January 2018 to October 2021. 160 cases of fistulae are coded using ICD-9 code, which includes cases of entero-enteric, entero-colic, ileo-rectal and entero-cutaneous fistulae were identified and included in study.

Each chart was reviewed for following information

1. Origin of Fistula
2. Volume of fistula output
3. Etiology of entero-cutaneous fistula
4. Use of Somatostatin analogues (Octreotide)

Drug Discription:

Sandostatin (Octreotide acetate) injection, a cyclic octa-peptide prepared as a clear sterile solution of octreotide acetate salt, in a buffered lactic acid solution for administration by deep subcutaneous or intravenous injection. Octreotide acetate, known chemically as L-cysteinamide, D-phenylalanyl-D-trpophyl-L-Lysyl-L-thronyl-N-(2-hydroxy-1-hydroxymethyl) propyl-cyclic(2-7)-disulfide, (R-)acetate salt, is a long acting octapeptide with pharmacologic actions mimicking those of natural hormone somatostatin.

Sandostatin (octreotide acetate) injection is available as sterile 1ml ampoule in strengths, containing 50, 100 or 500mcg/ml of octreotide (as acetate). The molecular weight of octreotide acetate is 1019.3.

RESULT

Octreotide was given in all the patients with enterocutaneous fistula admitted in JLN MCH, Bhagalpur. One was with high output

(750ml/day) and other was low output (50 ml/day). Octreotide 50-100mcg was given subcutaneously every 8 hours. After three doses of octreotide, a significant reduction of in fistula output was noted. The fistulae closed promptly after nine doses of octreotide, but in some patients fistula recurred 2 days later, with fluids loss of about 100-200 ml/day. This fistula closed spontaneously 1 month after discharge.

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