



## A STUDY OF OPEN DRESSING IN ENTEROCUTANEOUS FISTULA

**Dr. Hemant Kumar Das**

Senior resident, Department of surgery, Jawaharlal Nehru Medical College, Bhagalpur, Bihar.

**Dr. Hari Shankar Prasad**

Senior resident, Department of surgery, Jawaharlal Nehru Medical College, Bhagalpur, Bihar.

### ABSTRACT

Enterocutaneous fistula represents a challenging situation with respect to wound care and stoma therapy. An understanding of the principle of wound care and various facts that are available is of vital importance in the management of enterocutaneous fistula. In our study it was found that open dressing along with vigorous nursing care is of promising value in the enterocutaneous fistula management.

**KEYWORDS :** ECF, Open dressing, wound care, closed dressing, low output fistula.

### INTRODUCTION-

By definition, fistula is an abnormal epithelialised connection between two body structures. Wound can be classified as clean, clean contaminated, contaminated and infected. To achieve optimal healing, wounds must be noninfected. They should contain as much vascularised wound bed as possible and they should be free of exudates. Usually there are two types of dressing. Most of the surgeon like to apply dressing with gauze soaked in EC and betadine. In this method there may be chance of growth of bacteria underneath of dressing. In our study we kept the wound open to get benefit of daily observation. So wounds and its surroundings were kept free of faecal matter and exudates. And finally we got dramatic results after continuous open dressing. Open abdominal wounds with enterocutaneous fistulae present health care providers and patients with complex wound management issues. Frequently, large wounds with exposed bowel are present and require the utilization of multiple wound care modalities to provide a method of control and isolation of fistula effluent to allow for maximum wound healing. Wound care management of the enterocutaneous fistula (ECF) is one of the greatest challenges in the surgical patient and can present a complex problem for the clinician. ECFs represent a demanding situation in terms of their management that often requires a multidisciplinary approach to facilitate patient care and fistula healing. Medical, surgical, nutritional, and enterostomal wound care services are frequently involved each with a vital role.

### MATERIAL AND METHODS-

We selected 56 patients for our study. Our study was conducted at Jawaharlal Nehru Medical college and Hospital, Bhagalpur during July 2016 to March 2017. We included all the wounds of ECF admitted in our hospital in the department of surgery. This study was done on both sexes and all age group of patients having ECF. The wounds were cleaned by sterilised cotton and gauze. Nursing staffs were trained to wipe any collection surrounding the wound area. The inflamed skin sprayed with disinfectant solution. After repeated open dressing we observed the wound on daily basis.

### RESULTS-

Total 56 patients were admitted. Out of this 56 patients, 41 patients were discharged after 4 to 6 weeks. Remaining 9 patients referred to higher centre and 8 patients died during the treatment. Out of these 56 cases, 52 cases were due to an operative procedure in this institution while 6 cases were referred from different centres. In our centres most of the patients were operated for peptic ulcer disease, enteric perforation, traumatic perforation and cancer disease of the bowel. In our study 20 cases were operated for peptic ulcer disease, 18 cases for enteric perforation, 8 cases for traumatic perforation and 4 cases for cancer and 2 cases for volvulus of pelvic colon. After

occurrence of enterocutaneous fistula all the patients were given adequate treatment in the form of nutrition, electrolyte balance, antibiotics and antiseptic dressing. The most important part of the management was antiseptic dressing. Open dressing technique was applied in our study. The exudates, faecal matter and biliary discharge were mopped by sterile gauze. Once the dressing found to be soaked it was changed immediately. The nursing staff and attendants were also trained to do so. Although it was tedious job but results were fruitful. So nearly in all the patients open dressing was adopted as a procedure of choice.

### DISCUSSION-

Fistula of the small bowel is the most common type of fistula encountered by surgeon. Unless they are distal, small bowel fistula tend to be high output fistula. Because of the association between fistula output, uncontrolled sepsis, and mortality, the mortality of small bowel fistulas tend to be particularly high, especially as compared with colonic and other fistulas. Spontaneous closure occur in most of the cases provided there is no underlying malignancy, uncontrolled sepsis and crohns disease. It is crucial to continue full nutrition support and antibiotics well into the postoperative period. Early enteral nutrition can be tried. Parenteral nutrition should be continued to supplement enteral nutrition support until at least 1500 kcal can be taken per day enterally. In a study, it was shown that patients with ECF receiving less than 1000 calories per day had a mortality of 58%, while those receiving 1500 to 2000 calories had a mortality of 16%.

### CONCLUSION-

In enterocutaneous fistula operation is nearly impossible in the early period. It takes about 3 to 4 months to do so. During this period nutritional support, well antibiotics and dressing play very important role in spontaneous healing of fistulas. In our study, apart from the nutritional support and antibiotics dressing was of utmost importance. Out of 56 patients, 41 patients did not need any surgery. It was the open dressing that led to recovery and spontaneous closure.

### REFERENCES-

1. Ponsky JL. Complication of laparoscopic cholecystectomy. *Am J surg* 1991;161:393-395.
2. Karotkin L. Spontaneous internal biliary fistula. *M Ann District of Columbia* 1958;27:623-636.
3. Huges TB, Coleman MJ, Cohan A. Persistent postoperative enterocutaneous fistula: pathophysiology and treatment. *Aust NZ J surg* 1986;56:901-906.
4. Nassos TP, Braasch JW. External small bowel fistulas. *surg Clin North Am* 1971;51:687.
5. Ryan P. Two kinds of diverticular disease. *Ann R coll surg Engl* 1991;73:73-79.
6. Ginsberg RJ, Cooper JD. Esophageal fistula. *World J Surg* 1983;7:455-462.
7. Laskin JL. Parotid fistula after the use of external pin fixation: report of a case. *J Oral surg* 1978;36:621-622.
8. Shorr RM, Greany GC, Donovan AJ. Injuries of the duodenum. *Am J surg* 1987;154:93-98.

9. Smith DW, Lee RM. Nutritional management in duodenal fistula. *surg gynecol obstet* 1956;103:666-672.
  10. Harrison RA, Clark CG. Conservative surgery in crohn disease. *surg Annu* 1986;18:29-30.
  11. Rombeau JL, Rolandelli RH. Enternal and parenteral nutrition in patients with enteric fistulas and short bowel syndrome. *surg clin North Am* 1987;67:3:551-557.
  12. Sansoni B, Irving M. small bowel fistula. *World jsurg* 1985;9:897-903.
  13. Adibi SA. Intestinal phase of protein assimilation in man. *Am J Clin nutr* 1976;50:2266-2275.
  14. Fischer JE. The management of high output intestinal fistula. *Adv surg* 1975;9:139-176.
  15. Galland RB, Spencer J. Surgical management of radiation enteritis . *surgery* 1986;99:133-138.
  16. Welch M, Hoare EM. Late appenticocutaneous fistulae. *J R Coll surg Edinb* 1991;36:185-186.
  17. Loennecken W. 20 Ar Gammel AB Dominalfistel Fra Appendix. *Nord Med* 1942;15:2479.
  18. Brinson RR, kolts BE. Hypoalbuminemia as an indicator of diarrheal incidence in critically ill patients. *Crit care Med* 1987;15:506-509.
-