

# Faecal Fistula Following Appendicectomy: A Case Report

S.N. SHIRBUR, S.R. TELKAR, B.V. GOUDAR, MD. MUZAMIL PASHA, CHETHAN V.N.

## ABSTRACT

Faecal fistula is distressing for both the surgeon and the patient.

We are reporting here a case of post-appendicectomy faecal fistula which was successfully treated conservatively.

**Key Words:** Appendicitis, Appendicular abscess, Appendisectomy, Faecal fistula

## INTRODUCTION

Post-appendicectomy faecal fistula formation, though it is a rare complication, is associated with significant morbidity. We are presenting the case of a 33-year old lady who developed a faecal fistula after appendicectomy and drainage of the appendicular abscess.

## CASE REPORT

A 33-year old female presented with severe pain in the abdomen and high fever of 4 days duration. On examination, she was found to have a large tender lump in the right lumbar region and in the sub hepatic region. She had a raised TLC (12,400/cumm) with polymorph nuclear leucocytosis. She was diagnosed to have acute peritonitis due to appendicular perforation. On admission, she was febrile and hypotensive. On resuscitation, she responded well and the investigations revealed the following:

The USG of her abdomen showed a loculated collection of fluid in the sub hepatic and the lumbar regions, which measured 10.8x 7.4x10.2cm. This abscess was due to the perforation of her appendix [Table/Fig-1].

The patient was taken up for a laparoscopic drainage of the abscess and appendicectomy. The appendix was not found due to its retrocaecal and sub hepatic location, with lot of intraperitoneal adhesion. Hence, open laprotomy and appendicectomy were done. The appendicular stump was doubly ligated, a peritoneal toilet was performed and the abdomen was closed with a tube drain. Post operatively, she developed a faecal fistula on the 3rd day. Initially, the feculent fluid drained was about 150 to 200 ml, but gradually, it reduced to nil after 10 days. The patient made good recovery. A repeat sonological examination revealed no intraperitoneal collection.

## DISCUSSION

Faecal fistula is defined as an abnormal passage which communicates with the intestine. Post appendicectomy faecal fistula formation, though it is a rare complication, is associated with significant morbidity [1]. It was given the first place among the unfortunate sequelae of appendectomies by Royster in his work on appendectomy [2].

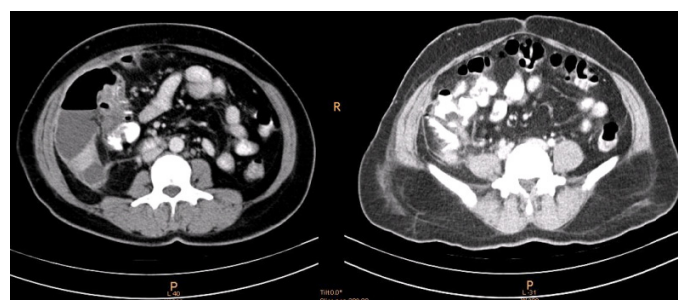
Post-appendicectomy faecal fistulas occur mostly when there is severe peri appendicitis which involves the base of the appendix

as well as the adjoining caecal wall. The leakage from appendiceal stump is incriminated as a major aetiological factor in such patients [3]. The injuries to the caecum during appendectomy, although they are not frequently reported, are another aetiological factor.

Genier et al., reviewed 22 cases of post-appendectomy faecal fistulas which were treated in a 24 year period (Jan 1970 to Dec 1993). They found that in 21 cases, the appendicitis was severe (suppurative, gangrenous or perforated) or appendectomy coated as technically difficult [4].



**[Table/Fig-1]:** The USG ABDOMEN showed loculated collection of fluid in sub-hepatic and lumbar region, measuring 10.8x 7.4x10.2cm. Abscess due to perforation of appendix?



**[Table/Fig-1]:** CT examination revealed focal intra peritoneal abscess 73x43x60mm in the right lumbar region with few air pockets in the collection & thickening of the caecum, ileum, ascending colon & omentum. However appendix was not visualised.

The other known aetiological factors include neoplasias of the appendix and the caecum, infective bowel conditions, especially tuberculosis, actinomycosis and Crohn's disease, distal obstruction and foreign bodies [5].

Some other authors believe that the use of purse-string sutures is the main contributory factor in the development of faecal fistula [6].

Although many recent studies have shown no significant difference between the two methods of the appendix stump [5, 7, 8], most of the surgeons continue to use purse-string sutures and carry out the daily practices of open appendectomy, as long as this stump situation permits [9-11].

At an early stage, a faecal fistula may be confused with a wound infection. Faecal fistulas usually present with persistent faeculent discharges from the wounds, which continue in spite of the attempts of drainage and repeated dressing [12].

Procedures like caecostomy or even RT hemi colectomy have been advised when there is severe inflammation and abscess formation to avoid the serious complication of fistula formation. The use of tube caecostomy seems to be quite reasonable in preventing post-appendectomy abscess and faecal fistula formation in patients with severe peri appendicitis which involves the base of the appendix as well as the adjoining caecal wall, and in cases of severe iatrogenic caecal lacerations, as they are associated with the least morbidity [1].

Most of the faecal fistulae respond to the conservative treatment in the absence of an underlying pathology and distal obstruction. The surgical management options for faecal fistulas include vacuum assisted closure [13] and fistuloscopy with fibrin glue injection [14].

## CONCLUSION

Post-appendectomy faecal fistula formation, though it is a rare complication, is associated with significant morbidity. An early

diagnosis is essential to institute proper treatment at an early stage of the disease. Most of the faecal fistulae respond to the conservative treatment in the absence of an underlying pathology and distal obstruction. The surgical management should be reserved for those who fail to respond to the conservative management.

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### AUTHOR(S):

1. Dr. S.N. Shirbur
2. Dr. S.R. Telkar
3. Dr. B.V. Goudar
4. Dr. Md. Muzamil Pasha
5. Dr. Chethan V.N.

### PARTICULARS OF CONTRIBUTORS:

1. Professor
2. Assistant Professor
3. Associate Professor
4. Post Graduate Student
5. Post Graduate Student

### NAME OF DEPARTMENT(S)/INSTITUTION(S) TO WHICH THE WORK IS ATTRIBUTED:

S.N. Medical College & HSK Hospital, Navanagar, Bagalkot, Karnataka, India.

### NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. S.N. Shirbur  
Department of Surgery  
S.N. Medical College & HSK Hospital  
Navanagar, Bagalkot, Karnataka, India - 587102  
Phone: 9448972509  
E-mail: dr.shirbur.s@gmail.com

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