



### Case Report:

## Appendicocecal Fistula – A Rare Complication of Appendicitis

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### Abstract:

Fistulisation of appendix to other organs or to the exterior through abdominal wall is a rare complication of appendicitis. We present one such rare case of appendicocecal fistula due to appendicitis in a patient initially managed conservatively for appendicular lump.

**Key Words:** Appendicitis; Fistulae; Complication

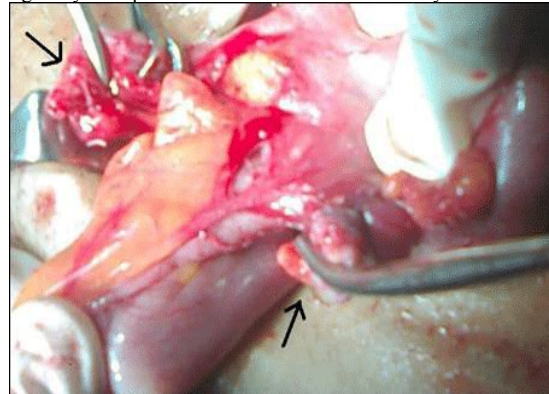
### Introduction:

Appendicitis is the most common cause of acute abdomen that requires emergency surgical intervention. Complications like perforation, peritonitis and lump formation are common due to delay in diagnosis. However complications like fistula formation with other viscera are rare.<sup>1,2</sup> These spontaneous fistulae occur due to rupture of inflamed appendix into these organs. Inflamed appendix gets adherent to these organs and bursts spontaneously into these organs or to exterior through the abdominal wall.<sup>3</sup> But the inflamed appendicular tip rarely gets fixed to bowel wall and hence appendico-enteric fistulae including appendicocecal fistulae are rarest entities in literature.<sup>4</sup>

### Case Report:

A 40 years old man was admitted with complaints of right iliac fossa pain with tenderness. There was no other medical or surgical history of significance in the past. On examination a tender lump was found in right iliac fossa and was diagnosed as appendicular lump. This was confirmed by ultrasonography. Patient was managed conservatively on intravenous fluids and intravenous antibiotics. The lump regressed and patient was discharged after one week. He was advised interval appendectomy after six weeks. At the time of appendectomy it was found, that the tip of appendix was fixed to cecum and was inseparable. The appendix was forming a horse shoe shaped configuration on the anterior surface of cecum. After proper isolation of the operation field, the appendix was divided in the middle (Fig 1) and as the cecum was squeezed gut contents came from both the cut ends of the appendix. Then with a blunt probe fistulous communication of appendix with cecum was confirmed. Appendectomy was performed and both stumps were closed and buried into cecum. Histopathological examination of the speci-

men of appendix ruled out inflammatory bowel disease and malignancy. The patient made an uneventful recovery.



**Fig 1: Horse shoe configuration with clamped cut ends of appendix shown with black arrows**

### Discussion:

Spontaneous appendicocolic fistula is a very rare complication of acute appendicitis. Various types of fistulae involving appendix reported in literature include appendicoenteric<sup>4</sup>, appendicoaortic<sup>5-7</sup>, appendicouterine, appendicotuboovarian<sup>2</sup>, appendicoureteric<sup>8</sup>, appendicoileovesical<sup>9</sup>, appendicovesical<sup>9</sup>, and appendicocutaneous<sup>1,10</sup> fistulae. The mechanism of formation of these fistulae has been described by the Kejjelman<sup>3</sup> as spontaneous rupture of inflamed appendix into the adjacent bowel, bladder or skin. In acute appendicitis the tip is frequently adherent to parenchymatous organs but fixation of inflamed appendix to the bowel wall is rather an infrequent finding<sup>4</sup> and fixation to cecum to make a reentry is even rarer possibility. This makes appendicocolic fistulas rarest among rare fistulas. The appendicovesicular, appendicocutaneous and appendicocolic fistulae are symptomatic and are usually diagnosed by preoperative evaluation but these appendicocolic fistulas are asymptomatic as in our case and can be diagnosed on interval appendectomy.

The optimum treatment in these patients consists of appendectomy with bipolar closure of two appendicular

stumps.<sup>4</sup> Thorough histopathological examination of the retrieved specimen of appendix is mandatory to rule out chronic inflammatory or malignant disease.

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