



## Computed Tomography Imaging of Sealed Perforated Diverticulitis-A Rarely Encountered Entity

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### Abstract

Diverticulitis is becoming common in the population throughout world due to faulty eating habits. In 10-20% there will be symptomatic diverticulitis and out of them 15% will develop perforation [1,3]. We present a case of 43 year old male who presented with pain lower abdomen and mild fever, CECT abdomen was done which revealed perforated diverticulitis with small adjacent collection. Surgery was done, and it also confirmed the CECT findings [1,2].

**Keywords:** Diverticulitis; Perforation

### Case Report

A 43 year old male presented with pain lower abdomen and mild fever for 5 days. CECT abdomen was done which showed wall thickening in the sigmoid colon without pouching with surrounding air and fluid containing small collection. Multiple air containing out pouching suggestive of diverticula were seen. There is presence of surrounding inflammatory changes in the mesentery. Operative finding was diverticular perforation with small abscess.

### Discussion

Diverticulitis is becoming common in the population throughout world due to faulty eating habits. In 10-20% there will be symptomatic diverticulitis and out of them 15% will develop perforation [1,4,5]. It can be divided into simple and complicated. The complications of the diverticulitis are further categorised into either inflammatory which include perforation, abscess and fistula formation or non-inflammatory which can be bleed, stricture formation and obstruction.

### Clinical presentation

It depends upon the type of complicated diverticulitis, whether it is inflammatory i.e. perforation, fistula or diverticular abscess or non-inflammatory i.e. Lower gastrointestinal haemorrhage, non-inflammatory stricture or obstruction [6,7].

### Key imaging diagnostic clues

Multiple diverticuli with adjacent air-fluid containing collection with surrounding inflammatory changes [4,8].

### Differentials

Colonic carcinoma-Small segment, circumferential bowel wall thickening >2 cm, enlarged lymph nodes and metastasis [7,8].

### Conclusion

Diverticuli formation is a common condition which may be complicated by inflammatory and non-inflammatory conditions. Sealed perforation is seen in approximately 15% of the population and are readily diagnosed by CECT imaging.



**Figure:** A 43 year old presenting with pain lower abdomen CECT images shows wall thickening in the sigmoid colon with out pouching(BLACK ARROW) with surrounding air and fluid containing small collection( WHITE ARROW). Multiple air containing outpouching suggestive of diverticuli were seen. There is presence of surrounding inflammatory changes in the mesentery. Operative finding was diverticular perforation with small abscess.

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