



MANAGEMENT OF INTRA-OPERATIVE CAECAL PERFORATION WITH OMENTAL PATCH; A RARE COINCIDENCE WITH APPENDICULAR PERFORATION

Surgery

Dr. Jitendra Kumar Saroj

Department of general surgery, Venkateshwara institute of medical sciences gajraula U.P., India

Prof. Dr. Abhay Bhatnagar

Department of general surgery, Venkateshwara institute of medical sciences gajraula, U.P India

ABSTRACT

Appendicular perforation is a rare complication of acute appendicitis and along with that caecal perforation is very rare .preoperative diagnosis is also very challenging. Till date no definitive management has advised it vary according to patient clinical condition. In this case we have used omental patch repair as usually performed in gastric or duodenal perforation.

KEYWORDS

Appendicular Perforation, Caecal Perforation, Omental Patch

INTRODUCTION

Acute appendicitis is the most common surgical condition in surgical field. Diagnosis is usually made based on full clinical history and examination. Appendicular perforation is a rare complication of acute appendicitis whilst, Caecal perforation is very very uncommon condition. Caecal perforation usually occurs at base of caecum. Preoperative diagnosis of caecal perforation is very challenging [1]. Caecal perforation may be common in diverticulitis, tuberculosis, trauma and malignancy.

This case is being reported to highlights the clinical presentation, management, and outcome of the cecal perforation with omental patch repair during management of appendicular perforation.

Case Study:

43 years old male patient came in emergency with complains of abdominal pain mainly right side of abdomen with fever since 3 days, patient had not passed flatus and faeces since last 3 days. Past history was not significant. Personal history of tobacco intake was present. On clinical examination there was severe tenderness in right side of abdomen, no guarding or rebound tenderness was present, vague lump was palpable, BP 120/80mmHg, PR 130/minute, spo2 was 96%, blood investigation was done. Hb 12.5 gm%, TLC 9300cell/cumm and ultrasonography was suggestive of appendicular perforation initially patient managed conservatively then after 4th days, patient passed faeces not flatus but all symptoms of pain and fever was resolved . Oral liquid was allowed as trail then again there was no complain but before discharged when blood investigation was repeated TLC was raised significantly 21000cell/cumm then patient develops fever on 5th days

Urgently CT scan of abdomen was advised and report suggestive of appendicular perforation with large right iliac fossa collection about 130mm x54 mm size [figure 1]. Then surgery was planned immediately

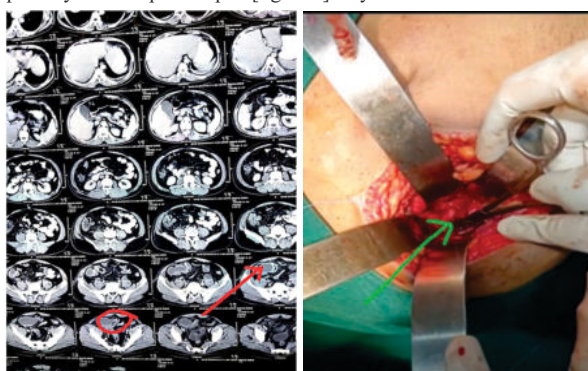
Right paramedian incision was given about 200 ml pus evacuated, peritoneal lavage done with normal saline, appendix was sloughed out with base of caecum, and around 8 mm size perforation was present in caecum. Stay suture was taken and omental patching was done and single pelvic drain was placed

Patient was kept nil orally. After 5th days, patient pass flatus, abdomen soft, then orally allowed. Drain was removed on 6th days and discharge after 10 days with satisfactory condition

DISCUSSION

Preoperative diagnosis is very challenging for spontaneous caecal perforation. Outcome depends on multiple factors mainly the onset of perforation, degree of peritoneal contamination, and time of intervention. Usually, Mortality rates associated with caecal perforation is high; it ranges from 30% to 72% [2]. Usually children or elderly people are more prone to caecal perforation [3]. some surgeons performed right hemicolectomy if caecal perforation is large and disease is less severe. while in case of severe septicemia, surgeons performed ileoascending stoma or diversion ileostomy [4].due to

broad spectrum antibiotics and image guided drainage availability some surgeons are taking risk and managing small caecal perforation with only primary omental patch repair like as in gastric and duodenal perforation or less invasive method such as putting USG guided drain.this may be future management of caecal perforation but need evaluation at large scale and more study. However till date there is no consensus regarding management of caecal perforation [5]. probably this is first case to report intraoperatively caecal perforation [figure 2] alongwith appendicular perforation and manage successfully with primary omental patch repair [figure 3] only.



Figure[1] Large collection in right iliac fossa

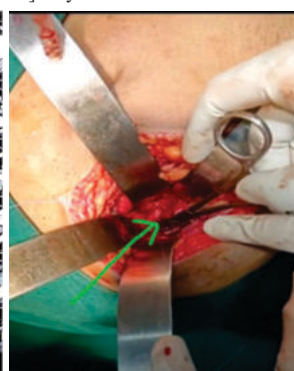


Figure [2] arrow head towards caecal perforation



Figure [3] omental patch repair

CONCLUSION;

Cecal perforation is a dreaded complication therefore if there is suspicion of perforated appendix with large collection in right iliac fossa; we need to CT scan that may help to detect early diagnosis. During appendectomy do not miss it, always caecum must be inspected. A primary hemicolectomy or ileoascending stoma or diversion ileostomy is recommended but primary omental patch repair may be a good option. But there have been no recent studies comparing this approach with primary caecum repair with omental patch. A larger prospective study is needed to compare both approaches and long term outcome.

REFERENCES

1. Zinner MJ, Ashley SW. Maingot's abdominal operations, Twelfth edition, McGraw Hill medical, 2013. Chapter 31," Appendix, Meckel's and other small bowel diverticula", Page 623-647.
2. M.D. Laskin, K. Tessler, S. Kive Cecal perforation due to paralytic ileus following primary caesarean section J. Obstet. Gynaecol. Can., 31 (2009), pp. 167-171
3. A. Kumar, M.G. Griwan, P. Naresh Spontaneous colonic perforation—rare presentation J. Surg. Acad., 3 (2013)
4. Cetinkaya Z, Girgin M, Ozercan IH, Ayten R. Non-traumatic cecal perforation on a female patient: Report of a case. Fusabil 2006; 20: 445-46
5. C.S. Wong, S.A. Naqvi Appendicular perforation at the base of the caecum, a rare operative challenge in acute appendicitis, a literature review World J. Emerg. Surg., 6 (2011), p. 36