

Study on Laproscopic Management of Stump Appendicitis

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Abstract

Appendectomy is one of the most common emergency surgical procedures. Stump appendicitis is well-recognised entity has been described in the literature. Still, with recent advance in imaging technique, it remains as a clinical challenge for diagnosis and effective treatment. For our knowledge, after an extensive search of English literature, no study had described about laparoscopic completion appendectomy for residual tip appendicitis. We authors hereby would like to emphasise the importance of complete removal of appendix not only stump part but also tip, especially in certain locations such as paracaecal, retrocaecal and subhepatic. Laparoscopy can be an option for the management of these patients, in selected cases, and with available expertise.

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I. Introduction

Aim

- To study to effect of laparoscopy in stump appendicitis

PLACE OF STUDY

Department of general surgery –Govt.Stanley medical college &hospital

DURATION

6 MONTHS

STUDY DESIGN

Observational study

PATIENT SELECTION

Patient who has features of stump appendicitis

EXCLUSION CRITERIA

- Contaminated and dirty surgeries
- Immunocompromised individuals
- Age<12
- pregnancy
- Patients who had history of trauma.

SAMPLE SIZE 15

II. Methodology

- Written informed consent will be obtained from all subjects before enrollment in the study
- All patients who underwent laparoscopic or open appendectomy.
- Patients coming with complaint of pain in right iliac fossa with features suggestive of stump appendicitis.
- Ultrasound abdomen or CT abdomen to confirm the diagnosis.
- Laparoscopic stump appendectomy is done with adhesiolysis.
- All patients were monitored in the post operative period for complications
- All patients were followed up for a period of six months.
- All details regarding the study will be recorded according to the pre designed proforma mentioned below

III. Results

AGE

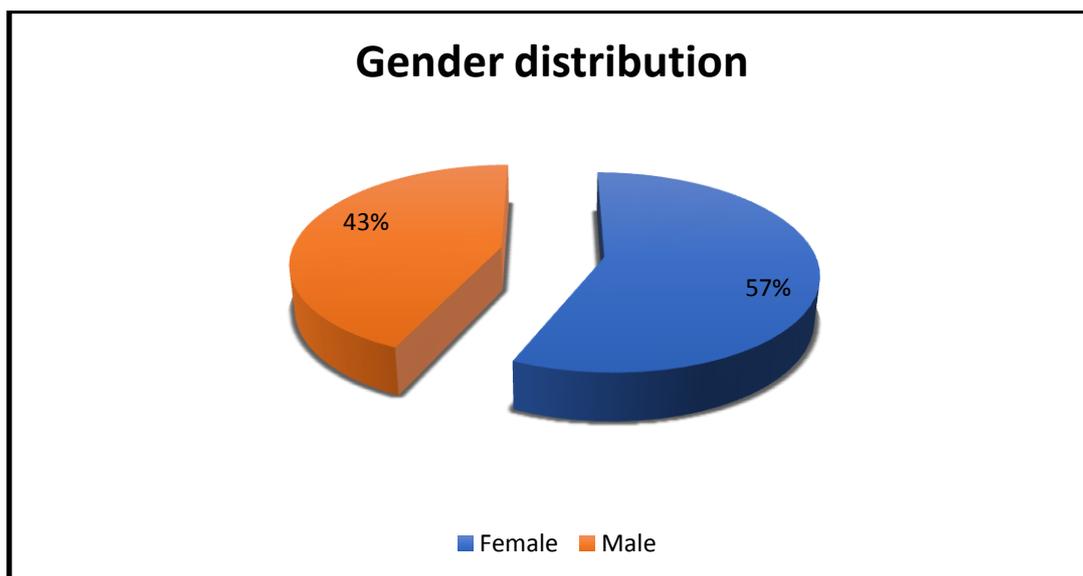
	Frequency
Upto 20 yrs	5
21 - 30 yrs	3
31 - 40 yrs	2
41 - 50 yrs	1
51 - 60 yrs	2
Above 60 yrs	2
Total	15

IN MY STUDY MOST COMMONEST AGE GROUP IS above YEARS , WHICH IS 33.3 % OF MY POPULATION

LEAST COMMONEST AGE GROUP IS ABOVE 41-50 WHICH IS 0.15% OF MY POPULATION

SEX

	Frequency	Percent
Female	8	56.7
Male	7	43.3
Total	15	100.0



IN MY STUDY THE MOST COMMONEST SEX AFFECTED IS FEMALE (57%)

STUMP SIZE

STUMP SIZE	<5MM	5-8MM	>8MM
NO OF CASES	1	12	2

MOST NO OF STUMP APPENDICITIS OCCURS IN STUMP OF SIZE OVER 5MM

IV. Discussion

Stump appendicitis is defined as acute inflammation of the residual appendicular stump which is usually rare and delayed complication of an appendectomy. The possible causes could be due to initial improper surgical technique or may be contributed by relative increase in number of laparoscopic appendectomies. However, the most recent review by Liang *et al.* revealed that incidence of stump appendicitis after standardised laparoscopic appendectomy is less than half as compared to open technique.[5] There is a high morbidity rate for stump appendicitis in comparison to the initial episode, due to a combination of delayed diagnosis and high rate of stump-related complications. The incidence of perforation of stump appendicitis is about 70%.[1]

Pre-operative diagnosis of stump appendicitis is difficult because of prior surgical history of appendectomy which usually leads to exclusion of appendicular pathology as differential diagnosis unless a high index of suspicion is exercised. Although ultrasound abdomen can be informative, the confirmation is usually obtained by cross-sectional imaging studies.[2] CECT features of stump appendicitis can include distended appendiceal stump, pericaecal inflammatory changes, abscess formation, fluid in the right paracolic gutter, caecal wall thickening and sometimes an ileocaecal mass.[6] Diagnostic laparoscopy is useful in some doubtful cases with persistent abdominal symptoms after ruling out other pathologies by doing extensive imaging. It may allow safe completion appendectomy simultaneously if diagnosis of stump appendicitis is confirmed.[7] The completion appendectomy is the treatment of choice for stump appendicitis, most commonly done as an open operation but a successful laparoscopic approach also had been reported in literature.[1] It is recognised that long appendiceal stump and improper identification of stump during appendectomy is the main risk factor for residual appendix.[5] In our case, during previous surgery, stump removal was complete, but the terminal portion of tip of appendix was left behind. Usually, a residual tip will not manifest as it would get sloughed off in view of ischemia, but in certain cases like ours, it can acquire the blood supply from adjacent organs, especially in areas like retrocaecal, paracaecal or sub hepatic locations. If the residual tip is left intact incidentally in such location during an initial appendectomy, it can manifest itself as described above. Mangi and Berger have suggested that the incidence of stump appendicitis can be decreased by proper identification of the base of the appendix and by leaving an appendiceal stump of <3 mm long.[8]

References

- [1]. O'Leary DP, Myers E, Coyle J, Wilson I. Case report of recurrent acute appendicitis in a residual tip. *Cases J* 2010;3:14.
- [2]. Awe JA, Soliman AM, Gourdie RW. Stump appendicitis: An uncompleted surgery, a rare but important entity with potential problems. *Case Rep Surg* 2013;2013:972596.
- [3]. Bu-Ali O, Al-Bashir M, Samir HA, Abu-Zidan FM. Stump appendicitis after laparoscopic appendectomy: Case report. *Ulus TravmaAcilCerrahiDerg* 2011;17:267-8.
- [4]. Sreeramulu PN, Shetty NS, Babu BM, Baig A, Supreeth CS. Stump appendicitis: A bane or boon of laparoscopic appendectomy. *World J LaparoscSurg* 2011;4:5-6.
- [5]. Liang MK, Lo HG, Marks JL. Stump appendicitis: A comprehensive review of literature. *The American Surgeon* 2006;72(2):162-6.
- [6]. Hirano Y, Shimizu J, Kinoshita S, Tatsuzawa Y, Kawaura Y. Stump appendicitis with lipohyperplasia of the ileocecal valve: Report of a case. *Indian J Surg* 2004;66:367-9.
- [7]. Botianu PV, Botianu AM, Boeriu C. Laparoscopic management of stump appendicitis after open appendectomy. *J Surg* 2016;12:37-8.
- [8]. Mangi AA, Berger DL. Stump appendicitis. *The American Surgeon* 2000;66(8):739-41.

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