



## Sub serosal adherent appendicitis a case report

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### Abstract

Appendectomy is a common surgical operation performed. Appendicetomy can be an easy operation whenever the appendicular pathology is acute and or sub-acute and the surgical anatomy is clear. Appendicetomy in re-current and of chronic appendicitis can be difficult and demanding. We report a case of re-current appendicitis having Sub Serosal Adherent Appendicitis requiring RETROGRADE Appendicetomy.

**Keywords:** re-current appendicitis, chronic appendicitis, retrograde Appendicetomy

### Introduction

Appendicitis is a common abdominal surgical condition requiring operation and reported incidence is about 40,000 hospital admissions annually in England<sup>[1]</sup>. Appendicitis is more common in males than females with 1:4:1 ratio and the life time risk about 8.6% in males and for females it is 6.7% in the USA<sup>[2]</sup>.

### Case Report

A 27 years old married lady was admitted to KLECC hospital (Sept 2019) with history of pain abdomen with episodes of pain, vomiting and fever since 2 weeks. The patient had taken some treatment from GP, (General practioners).

She gave a strong history of similar episodes of pain abdomen on and off since 6 months and she used to take treatment from GP.

She came to our hospital as she needed a definite treatment.

The patient did not have any medical diseases. Personal, family history and social history was non-contributory.

On examination patient was an young lady. Thinly built and underweight (40kg) and general physical examination was within normal limits. Vital signs were BP 110/70 – P 80/ - RS 16/ min.

Abdominal examination revealed only deep seated tenderness in the right iliac fossa and there was no rigidity or guarding with normal bowel sounds.

Systemic examination of CVS, RS all were within normal limits.

### Laboratory Investigation

#### ▪ CBC

Hb	:	11.7 gm%
RBC	:	4.20
WBC	:	8200
Platelet	:	230000
Count		
DC		
N	:	70%
L	:	30%

### Laboratory Investigation

▪ RBS	:	74 mg/dl
▪ UREA	:	20 mg/dl
▪ Creatinine	:	0.90 mg/dl
▪ HIV / HbsAg:		Negative
▪ Uine Routine:		Normal
▪ / Micro		
▪ ECG	:	WNL
▪ CXR	:	WNL

### Laboratory Investigation

#### ▪ USG

Done from outside

Appendix not visualized

Probe tenderness present

Other visceral normal

Abdominal sonography done from outside was reported as appendix was not visualized and all the abdominal viscera was normal.

It was suggested to repeat the sonography but it was not done due to financial constraints.

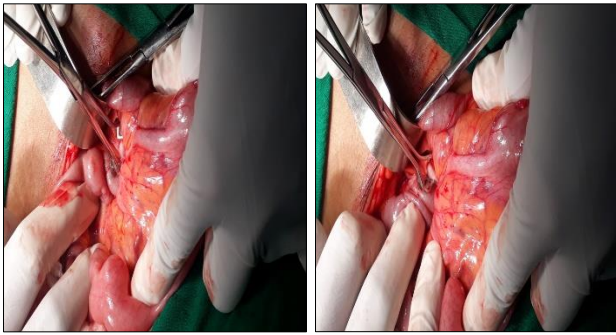
Clinical diagnosis of RE-CURRENT APPENDICITIS and planned for appendicetomy.

The patient underwent appendicetomy under GA through Right McBurney's incision.

Findings were appendix was deep retrocaecal with sub subserosal adherent only the small part of the tip was seen in the depth with mobilization of the caecum.

It was decided to do RETROGRADE APPENDICETOMY, was performed after careful dissection of the serosa all along the appendix on the both sides.

The patient did well and was discharged on the 4<sup>th</sup> post-operative day.



**Fig 1:** Tip is not Seen Clearly

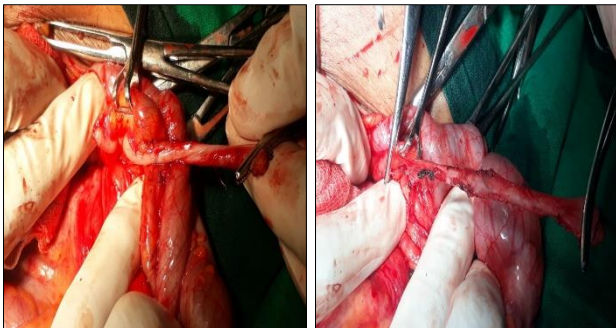
**Sub-Serosal Adherent Appendix**

The Histopathological report has come as HPR No 4750/19 as sub-acute appendicitis.

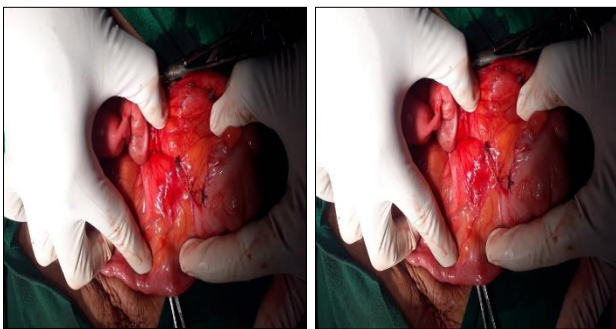
**Gross Examination**

5cm long appendicitis, surface congested, Lumen is patent with faecal matter.

Cut Session Shows: Cell infiltrate of plasma cells, lymphocytes, eosinophils and neutrophils. Serosa is congested with blood vessels.



**Fig 2:** Serosal Dissection Dissection Continued



**Fig 3:** Appendicectomy Completed

**Discussion**

Appendicectomy is a commonly performed surgery in acute abdominal conditions. Routinely the procedure is done in ante grade manner i.e, tip first dissection method. Ante grade appendicectomy is commonly performed and is possible in majority of the cases but not possible whenever

- Appendicular tip is not seen
- Appendicular tip friable
- Appendicular tip is perforated

- Appendicular tip is gangrenous - - - etc

Retrograde appendectomy is performed in the above said conditions and it was also done in our case.

**The procedure adopted was**

The Base of the appendix was dissected first carefully and ligated proximally and dissected totally up to the tip doing adhesiolysis along the entire length of the appendix and removed. Careful haemostasis is achieved and surgical incision was closed in layers. The term re-current appendicitis and chronic appendicitis are still controversial terms.

Many author support and some disagree, However Paterson-Brown [3]. Suggest that there is chronic variety who suffer from re-current appendicitis and there is a small sub group who suffer from less acute episodes after a severe attack [4].

The debate on clinical entity of chronic appendicitis and re-current appendicitis still continues [5, 6].

In conditions of re-current right lower abdominal pain leading to appendicectomy is termed as re-current appendicitis only when histopathologically is of acute inflammation [7].

In case of chronic appendicitis in which after appendicectomy the histopathological report indicates acute inflammatory changes along with lympho-histiocytic infiltration on the back ground of pre-ponderant. Fibrosis.

Most of the surgeons agree that most of these patients who suffer either chronic or re-current appendicitis patient have symptoms resolution after the operation [9].

**Summary**

Retrograde appendicectomy is necessity when the distal appendix and tip is not accessible or friable, also whenever there is subserosal adherent appendix needs this methods.

There is minimal dissection and minimal manipulation of the ileo-caecal junction.

We recommend retrograde appendicectomy is chronic and re-current appendicitis with serosal adhesions as we have done in our case.

**References**

1. Hospital Episode statistic - Primary diagnosis – Summary: www.hesonline.nhs.uk, 2006.
2. Murphy J. Two thousand operations for appendicitis, with deductions form his personal experience. Am J Med Sci. 1904; 128:187-211. [Google Scholar]
3. Mattei P, Sola JE, Yeo CJ. Chronic and recurrent appendicitis are uncommon entities often misdiagnosed J Am Coll Surg. 1994; 178:385-389 View Record in Scopus Google Scholar
4. Paterson S. Brown Acute conditions of the small bowel and appendix Ch.9 O.J Garden, S. Paterson-Brown(Eds.), A Companion to specialist surgical practice: core topics in general and emergency surgery(3<sup>rd</sup> ed.), Elsevier Saunders, Philadelphia, 2005, P 178 Google Scholar
5. Barber MD, McLaren J, Rainey JB. Recurrent appendicitis Br J Surg, CrossRef View Record in Scopus Google Scholar. 1997; 84:110-112.
6. Seidman JD, Andersen DK, Ulrich S, Hoy GR, Chun B. Recurrent abdominal pain due to chronic appendiceal disease South Med J CrossRef Google Scholar. 1991; 84:913-916.

8. Carnett JB, Boles RS. Fallacies concerning chronic appendicitis JAMA, CrossRef Google Scholar. 1928; 91:1679-1682.
9. Andersson R. Meta-analysis of the clinical and laboratory diagnosis of appendicitis. Br J Surg. 2004; 91:28-37. [PubMed] [Google Scholar]
10. Leardi S, Delmonaco S, Ventura T, Chiominto A, De Rubeis G, Simi M. *et al.* Recurrent Abdominal pain and “Chronic appendicitis” Minerva Chir, View Record in Scopus Google Scholar. 2000; 55:39-44.