Case Report

Appendiceal stump abscess-5 months after appendectomy- A Case Report

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Abstract
Appendiceal stump abscess after open appendectomy is extremely rare. Stump appendicitis after laparoscopic appendectomy is more common due to non inversion of stump and a long stump. In our case, patient was operated for perforated appendix, sealed by omentum with minimal collection in Right Iliac Fossa. Her post operative period was uneventful. But she developed an abscess localised in right iliac fossa five months after appendectomy. It was a rare presentation.

Keywords: Appendiceal stump, abscess, appendectomy, laparoscopic appendectomy

1. Introduction
After appendectomy Uterine Stump appendicitis and intraabdominal abscess, are common with laparoscopic surgery but rare with open surgery. Only few cases have been reported as appendiceal stump abscess.

2. Case Report
30yr old lady admitted in our hospital with acute abdominal pain in RIF, vomiting and mild grade fever. On Examination there was tenderness in Right Iliac Fossa was noted and on Ultra sonography abdomen, she was having minimal intraperitoneal collection and focally tender nonperistaltic loop. On exploration, perforation of appendix at its base, having omental adhesion and minimal collection in the vicinity was noted. Retrograde appendectomy was done; stump was not inverted due to inflammation of caecum. Her postoperative period was uneventful. Patient was discharged on 5th post operative day and sutures were removed on 8th post op day. Histopathology report was S/O acute non specific appendicitis.

Five months later, Patient came back with History of lump in right iliac fossa, pain and high grade fever. O/E she was febrile, pulse 103/min and, tender, localized; fix lump was present in Right Iliac Fossa, her lab investigations were S/O HB 6 gms, TLC 20000, ESR 10, her ultrasonography was showing localized collection in Right Iliac Fossa. Exploration was done by taking transverse incision at highest point over lump in Right Iliac Fossa five months after appendectomy. It was a rare presentation.

3. Discussion
Baumgardner in 194911 was the first to describe stump appendicitis, and since then a total of 36 cases have been reported in a comprehensive review of the English language literature.12-13 Some reports have suggested that laparoscopic appendectomy is associated with an increased incidence of stump appendicitis when compared with open appendectomy. However, the most recent comprehensive review of the literature examining thirty-six (36) cases of stump appendicitis by Liang et al14 revealed that only 34% of cases were initially performed laparoscopically, and 66% were initially performed as open surgeries, thereby, supporting that it can occur after either laparoscopic or open appendectomy.19

Stump appendicitis is a real entity not often considered when evaluating patients with right lower quadrant abdominal pain after appendectomy and may be probably an underreported problem.12,20-21 It can occur from about a week to an interval of twenty-three year after appendectomy but our case presented four and half months postlaparoscopic appendicectomy.14,15

Preoperative stump appendicitis diagnosis is still clinical because typically patients present with signs and symptoms similar to acute appendicitis. Clinicians should have a high index of suspicion for stump appendicitis22,23 in patients with a history of previous appendectomy who presented with an acute appendicitis-like picture.24,25

Plain films, USD, and CT26 may all play a role in its diagnosis especially in those associated with abscess formation or perforated cases with intraperitoneal fluid collection in the right lower abdomen or in the pelvis. The surgical error commonly ascribed to either technique of open or laparoscopic method is the inability in not adequately identifying the base of the appendix, thereby resulting in failure to completely remove27 the appendix during the initial operation of appendectomy. Some authors have suggested stump inversion routinely in all cases after removal of the appendix as a way of minimizing the incidence of stump appendicitis, but others think this is not necessary as long an appendiceal stump of not more than 3 mm in depth is left behind.27,28 Different methods of dealing with stump appendicitis include reappendectomy with or without stump inversion, or even limited right hemicolecotomy.29,30

In our case during exploratory laparotomy, the appendiceal stump was ligated, its base sutured, and the accompanying abscess was drained, followed by peritoneal toilet, abdominal closure and a drain left in situ.

We, therefore, recommend early recognition of this clinical entity to decrease morbidity and high rate of perforation associated with delayed diagnosis.7,18,31,32

IJBRR (2014) 05 (09)
It has therefore been proposed that diagnosis of stump appendicitis should be borne in mind in the differential diagnosis of patients presented with right lower abdominal pain with past history of appendectomy.

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