

Appendicectomy for Appendicular Mass

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Patients of appendicular mass presenting over a period of one year in a surgical unit of Mayo hospital were studied. Those who were fit for anaesthesia were operated and the outcome of the surgery was analysed. Out of the fifty patients studied there were 31 males and 19 females. The male to female ratio was 2.2:1. The ages of the patients ranged from 15-56 with mean age as 27.34 years. The average duration of appendicular mass was 4.38 days (2-7 days). The hospital stay was 3.7 days (2-7) days. Regarding major complications wound infection was seen in 7(14 %), which seems comparable to that of routine appendicectomy. We recommend exploration of appendicular mass in all the cases because it cuts short the hospital stay, cures the disease and carries no extra morbidity as has been considered in the past .

Key words: appendicitis, mass, appendicectomy.

Acute appendicitis is one of the surgical emergencies where early surgery is recommended. If the patient presents after three to four days of pain, a mass may be felt in the right iliac fossa. This usually happens in 2-6% of the cases of acute appendicitis¹. The mass consists of diseased appendix, caecum, and adjoining ileum covered over by omentum. In the midst of the mass one may find purulent exudate². The mass may turn into an abscess if it is left untreated. This may also burst into the peritoneal cavity leading to generalized peritonitis. The abscess can cause portal pyemia and pyogenic liver abscesses. Appendicular mass has conventionally been treated by conservative measures popularly known as Ochsner Serren regimen³. The patient requires to be admitted for strict observation and is kept nil by mouth for many days. The mass resolves in 80% of cases⁴. The remaining patients develop an appendicular abscess, which requires surgical drainage. Those patients in whom the mass resolves are advised to come for interval appendicectomy after 6-8 weeks. The patient who recovers may get recurrent attack of appendicitis even before the date fixed for interval appendicectomy. There are good number of patients who are lost to follow up. Appendicectomy performed on the patients who present with appendicular mass at any stage does not increase the morbidity or mortality, provided it is done by an experienced surgeon^{5,6}. Our experience of appendicectomy in fifty patients presenting in 1999 at Mayo hospital is presented.

Material and Methods:

This prospective study was carried out in the East surgical ward of Mayo hospital Lahore from Jan 1999-Dec 1999, Fifty patients admitted with the diagnosis of appendicular mass of any duration were operated for appendicectomy. Those who were unfit for General Anaesthesia were excluded from the study. All cases were operated either by consultant or senior registrar in the emergency theatre.

Results:

Out of the fifty patients studied there were 31 males and 19 females. The male to female ratio was 2.2:1. The ages of the patients ranged from 15-56 with mean age as 27.34 yr. The average duration of appendicular mass was 4.38 days (2-7 days). The hospital stay was 3.7 days (2-7) days. Regarding major complications wound infection was seen in 7(14%). One of the patients who developed a faecal fistula (low output) presented after 10 days. This fistula closed over a period of four weeks. The next common complication was post operative chest infection 4-(8%).(Table 1)

Table 1

Complications	n=	%age
Wound infection	7	14
Chest complications	4	8
Residual abscesses	1	2
Haematoma	1	2
UTI	1	2
Faecal fistula	1	2

Forty five patients had appendicectomy, in three patients limited right hemicolectomy was done for ilcocecal tuberculosis. They were later put on antituberculous treatment after histological confirmation. Two patients underwent simple drainage of appendicular abscess,(Table 2) There was no mortality in this series.

Table 2

Procedures	n=	%age
Appendicectomy	45	90
Right hemicolectomy	3	6
Drainage of abscess	2	2

Discussion

The traditional policy to keep the patient of appendicular mass under conservative management has always been

recommended¹². This management protocol has been justified in the days when anaesthesia facilities were lacking, proper antibiotic cover could not be achieved. The services of experienced surgeons were not available in the emergency operation theatres. Now a days with the availability of qualified surgeons of senior registrar level appendicectomy for appendicular mass has become a safe procedure. It not only cures the patient of the disease but also obviates the need for readmission for Interval appendicectomy^{7,8,9}. Although it is associated with some morbidity but these complications are comparable to routine appendicectomy. Exploration of appendicular mass may also be of diagnostic importance especially in cases of ileocaecal tuberculosis which remain a diagnostic enigma.^{10,11}. An ileocaecal resection followed by antituberculous treatment may prove to be curative. The patients who have been managed conservatively by hospital admission and treated with antibiotics and intravenous fluids for a period of 7-10 days. have to tolerate a period of considerable pain and agony. They also have to under go unpleasant repeated examinations to monitor the course of the disease. This involves a heavy work load on staff, who remain on guard for any complication to arise. The patient remains nil by mouth for so many days. They become more stressed by repeated injections of antibiotics and intravenous fluids. When the conservative treatment fails and the abdominal pain becomes more severe the patient is subjected to laparotomy. If the patient responds to the conservative therapy, he has to be called for interval appendicectomy^{12,13}. This would obviously require readmission and an additional cost of treatment and a considerable period away from work. Those who believe in conservative management argue that appendicectomy done after a mass has formed is hazardous since it involves dissection of the inflamed ileum and the caecum which is covered up by the omentum. Injury to the gut may result in a dreadful complication of faecal fistula^{9,14}. Surgeons in the past were scared of these complications because of lack of experience in handling these masses. Cholecystectomy in acute cholecystitis was also considered to be dangerous and surgeons always advocated a conservative approach to a patient of acute cholecystitis. Now it has been proved beyond doubt that early cholecystectomy done for acutely inflamed gallbladder is not only cost effective but as a better outcome as compared to interval cholecystectomy³. The appendicular mass is not much different from an acute gallbladder phlegmon. It requires the skill of an experienced surgeon to operate upon the appendicular mass. With improvement in anaesthesia and antibiotics and skillful surgical techniques, appendicectomy for appendicular mass has become safe and is recommended by many surgeons². They believe that appendicectomy is technically possible in most of the cases and when successfully performed it obviates the prolonged disability resulting from the traditional conservative management¹⁵.

It reduces the hospital stay, cost of management and a cure is achieved during the same admission. Prophylactic antibiotic therapy, adequate relaxation, a generous incision and painstaking gentle dissection are prerequisites for an excellent outcome. There have been various studies in the past where people have compared the results of conservative Vs operative treatment of appendicular mass. A comparative local study published in 1996 highlighted the superiority of operative treatment over the conservative management. In this study appendicectomy was done in patients presenting within 5 days after the onset of pain. In our present study appendicectomy has been done on all patients irrespective of the duration of mass.

The results of this study are comparable to this local study. The only significant difference is the complication rate which is slightly high in this study probably because of the surgery done on masses of much longer duration. One of our patients who developed a faecal fistula had presented after 10 days of pain. The caecum close to the root of the appendix was very oedematous and friable and the stump was closed by a pursestring. The fistula was low output and spontaneously closed over a period of four weeks.

We recommend that the appendicular mass of any duration should be operated for appendicectomy, since it achieves complete cure and abolishes the need for second admission for interval appendicectomy.

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