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Management of appendicitis and its complications at teaching hospital brims, Bidar

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Abstract

Introduction: General surgeons, even in this era of antibiotic abuse, encounter appendicitis as one of the most common abdominal emergencies, in delayed presentations, with confusing presentation. Our aim of study is to study the current state of management of appendicitis in patients coming to BRIMS medical college from three states.

Materials and methods: A retrospective study was carried out in BRIMS, cases from 01st July 2014 to 31st December 2014.

Results: The commonest presentation was acute appendicitis. Open appendectomy was routinely performed for the same in BRIMS. 56.00% of patients with appendicitis had some complication and 84.00% of the total number of patients required surgery. 92.00% were taken up on emergency basis. There was no mortality in the studied cases.

Conclusion: The most commonly encountered complication was appendicular mass.

Keywords: Appendicitis, appendectomy, appendicular mass

Introduction

General surgeons, even in this era of antibiotic abuse, encounter appendicitis as one of the most common abdominal emergencies, in delayed presentations, with confusing presentation. It is the first surgery which every budding surgeon wants to master. In the united states around 2,50,000 appendectomies are performed every year ^[1]. Even pediatric surgeons and colorectal surgeons perform appendectomies.

Though a common condition, dilemmas continue regarding its diagnosis, investigations and management. With improved diagnostic facilities like CT SCAN, laparoscopy, and quality healthcare infrastructure, a significant reduction in morbidity and mortality is seen due to appendicitis in this era ^[2]. Less than 1% mortality is seen in appendicitis ^[3]. Our study aims to provide our surgical experience in management of appendicitis and its complications.

Materials and Methods

A retrospective study was carried out in BRIMS, a premier institution in north Karnataka for patients getting admitted in all the units of surgery department, from 01st July 2014 to 31st December 2014. The data of all patients who were managed for appendicitis during this period relating to age, gender, diagnosis, management, time of surgery and complications were collected from register.

Results

50 patients with a diagnosis of appendicitis and its complications in total, were managed in BRIMS during this period. 22 patients (44.00%) were females and 28 patients (56%) were males.

The average age of female pts was 27.5 years with patients lying in the age group of 07 - 60 years. The average age of male pts was 21.82 years with patients lying in the age group of 09 - 47 years.

A total of 22 patients (44.00%) had only acute appendicitis whereas 28 patients (56.00%) of patients had one or the other complications. In our study, Appendicular mass (08 patients- 16.00 %) appeared to be the commonest complication (Table 1).

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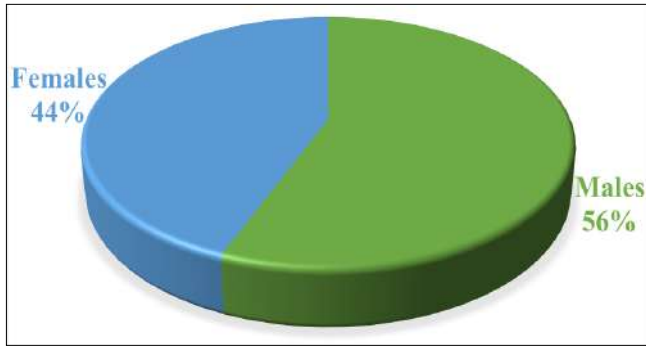


Chart showing Gender distribution

Table 1: Distribution of appendicitis and its complications

Sl. No	Diagnosis	Number	Percentage (%)
1	Acute appendicitis nongangrenous	22	44.00
2	Acute gangrenous appendicitis	07	14.00
3	Perforation	04	08.00
4	Appendicular mass	08	16.00
5	Appendicular abscess	04	08.00
6	Recurrent appendicitis	03	06.00
7	Intestinal obstruction	01	02.00
8	Perforation+gangrene+abscess	01	02.00
	Total	50	100

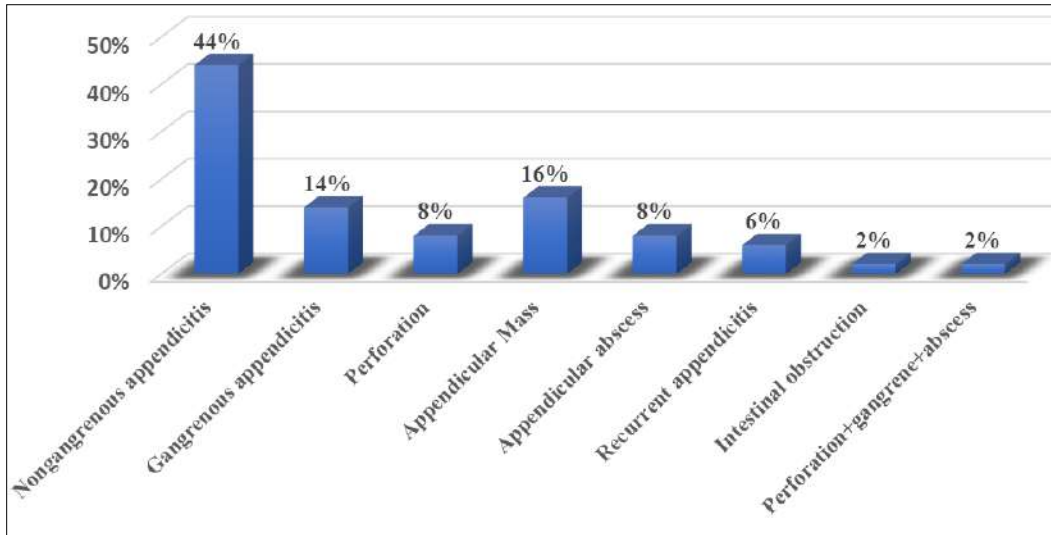


Chart showing Distribution of appendicitis and its complications

08 patients (16.00%) required conservative management because of appendicular mass. 42 patients of the total 50 patients (84.00%) required surgical intervention. 04 patients (08.00%) were taken for elective intervention and 46 patients (92.00%) required emergency intervention. Open appendectomy was done for all cases.

Table 2: Type of management

Sl. No	Management	Number	Percentage (%)
1	Conservative [non – operative]	08	16.00
2	Open appendectomy	41	82.00
3	Caecostomy	01	02.00
	Total	50	100

One patient required caecostomy, due to a large perforation. A total of 06 patients (12.00%) had complications, surgical site infection (SSI) in 04 patients (08.00%) and abscess due to appendicular perforation in 02 patients (04.00%) seen. There was no mortality.

Discussion

A physician anatomist, Berengario da Capri, in 1521, historically described appendix as a worm like structure originating from the posteromedial wall of caecum, approximately 2 cm inferior to the opening of the ileum [4]. The point of maximum tenderness in acute appendicitis (Mc burney's point) was described by an US surgeon Charles Mc burney in 1889. Lanz incision (cosmetic incision) was described by Otto Lanz, a surgeon in Amsterdam, in the year 1908. Kurt Semm performed the first laparoscopic appendectomy in 1980 [5].

Routinely, appendicitis is diagnosed clinically and operated by choice, recently concepts and thinking is changing, the most commonly used tools in the diagnosis of acute appendicitis are Alvarado score⁶ and ultrasound, contrast enhanced CT scan of abdomen and pelvis is the investigation of choice in doubtful cases. Laparoscopy has reduced the morbidity associated with appendicitis. Interval appendectomy recommendation for appendicular mass varies. In spite of all possibilities, the management of acute appendicitis differs from surgeon to surgeon, institution to institution, globally [7].

In our study appendicular mass was the commonest complication, others being perforation, gangrene. The incidence of perforation ranges about 12-35%. In the present era, laparoscopic appendectomy has become the procedure of choice, but open appendectomy is still performed for various reasons like patients of low income group, availability of trained assistant at emergency hours, expertise of different surgeons.

Intra-abdominal abscess, paralytic ileus, wound infection are the common postoperative complications seen [1]. The rate of wound infection varies from 05.00% to 20.00% [8], in our series wound infection was 12.00%. The mortality ranges from 0.17% to 7.5%. We had no mortality in this series.

Conclusion

Open appendectomy is commonly done in our hospital and acute appendicitis is the commonest cause of acute abdomen. Appendicular mass is the most common complication seen in our study (16.00%), around 12.00% of patients will develop wound infection following open appendectomy.

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