Original Research Article

DOI: http://dx.doi.org/10.18203/2349-2902.isj20170474

Appendicular lump: comparative study of immediate surgical versus conservative management

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Received: 27 January 2017 Accepted: 31 January 2017

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ABSTRACT

Background: At present acute appendicitis is leading cause of acute surgical abdomen. Treatment of choice for non-complicated appendicitis is appendicectomy. Delayed presentation of appendicitis cause lump formation in 2-6% case. Traditional treatment of appendicular lump is conservative treatment followed by interval appendicectomy. Our study was done to make a better management plan for lump patients.

Methods: In this retrospective study 52 patients having appendicular lump randomly divided in two group, Group 1 conservative treatment followed by interval appendicectomy after 6-8 weeks and group 2 immediate surgery. Highest incidence of appendicular lump was found in age group of 21-30 year. Average hospital stay in group 1 was 12 days as compare to 4 day in group 2.

Results: Immediate surgery in our study suggest better management plan for appendicular lump in term of less hospital stay, less economic burden, no need of readmission in hospital and no major complication.

Conclusions: Early exploration for appendicular lump is preferred option rather than conservative treatment followed by interval appendicectomy.

Keywords: Appendicitis, Appendicular lump, Management

INTRODUCTION

Acute appendicitis in most common cause of acute pain abdomen.^{1,2} Appendicitis is classified into complicated and uncomplicated type. Standard treatment plan for uncomplicated appendicitis is immediate appendicectomy. Appendicular lump formation occur in 2 - 6% cases of appendicitis because of self-defense mechanism of body to localize the infection in peritoneal cavity due to delayed presentation of patient.¹

Lump formation is more common in extremes of age (children and old age).³ Appendicular lump may further complicate to appendicular perforation, abscess formation, necrosis and gangrene of appendix or caecum

wall. Traditional treatment of appendicular lump i.e. conservative treatment followed by interval appendicectomy is still popular among surgeons. But early exploration of appendicular lump is better choice in present scenario because of less overall hospital stay, low economical burden with no added major complication.

METHODS

Over a period of one and half year, this retrospective study was conducted in tertiary level hospital. During this period (January 2015 to June 2016) total 460 patients were admitted in general surgery ward with diagnosis of acute appendicitis. 52 patients out of these 460 patients were diagnosed as appendicular lump formation.

Diagnosis was made after detailed clinical examination, routine blood investigation and ultrasonography of whole abdomen. Our study was conducted with these 52 patients, which include all age and sex group.

All 52 patients were divided randomly in two groups, 26 patients in each. Group 1 patients were managed by conservative treatment followed by interval appendicectomy after 6 - 8 weeks. Group 2 patients were managed by immediate surgery (appendicectomy).

RESULTS

The results are based on data of these 52 patients treatment and outcome. Aim of our study was making a better management plan for appendicular lump.

Table 1: Incidence of age.

Age (in years)	No. of patients	% of patients
≤10	1	1.92
11-20	12	23.07
21-30	20	38.46
31-40	13	25
41-50	4	7.69
51-60	2	3.84
≥61	0	0

Table 2: Gender distribution.

Gender	Group 1	Group 2	Total
Male	16	18	34 (65.38)
Female	10	8	18 (34.62)

Table 3: Per-operative finding.

Operative finding	Total	Percentage
Appendicular phlegmon	16	57.14
Appendicular gangrene	8	28.57
Abscess and perforation	4	14.29

Table 4: Duration of hospital stay.

Duration (days)	Group 1	Group 2
≤3	0 (0%)	17 (65.4%)
4-6	7 (26.9%)	8 (30.77%)
≥7	19 (73.1%)	1 (3.83%)

24 patients (92.3%) of group 1 were managed successfully by conservative treatment followed by interval appendicectomy. 2 patients (7.7%) of group 1 did not respond to conservative treatment and underwent immediate appendicectomy.

25 patients (96.15%) of group 2 discharged within 6 day of admission to hospital. 65.4% patients of group 2 discharge in 3 day. Only one patient (3.85%) needed longer stay in hospital because of fecal fistula develop

after surgery. Fecal fistula was managed conservatively. Average hospital stay in group 2 was only 4 days while average hospital stay in group 1 was 12 days.

DISCUSSION

Incidence of appendicular lump formation in acute appendicitis patients in our study was 11.30% which is comparable to available literature. Main cause for lump formation was delayed presentation of patient. Maximum patients in our study belong to young (21-30 years) age group 38.46%. Male to female ratio was 1.89. These results are comparable to other studies. As

Maximum patients of group 2 operated successfully without any complication and discharged within 6 days, 17 patients (65.4%) were discharged within 3 days. In first group 73.1% patients stayed in hospital for more than 7 days and 26.9% patients were discharged within 4-6 days. Immediate surgery (appendicectomy) is better way of management for appendicular lump in term of less hospital stay, less economic burden of treatment, early return to work with no major complication. These results are comparable to other study.⁴⁻⁹

In this study appendicular phlegmon was most common (57.14%) finding during surgery followed by gangrene.⁵⁻⁸

CONCLUSION

Early exploration for appendicular lump is preferred option rather than conservative treatment followed by interval appendicectomy. Over all hospital stay and economic burden of treatment is much less as compare to traditional management.

Funding: No funding sources Conflict of interest: None declared Ethical approval: Not required

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Cite this article as: Agarwal VK, Agrawal S. Appendicular lump: comparative study of immediate surgical versus conservative management. Int Surg J 2017;4:893-5.