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Conservative Management in Appendicular Mass; A Case Report

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Abstract

The management of appendicular mass is encircled with debate. Therapeutically management has been conservative, with interval appendicectomy performed weeks after the mass had resolved. Still it is commonly applied procedure throughout world. Current case is a 26 years old female was admitted to the hospital presented with abdominal pain for 1 week. Patient undergo several ultrasound scanning to rule out whether she had appendicular mass or ovarian mass. Based on ultrasound scan result, she is diagnosed having appendicular mass. The patient is on IV cefoperazone, metronidazole, tramadol and pantoprazole as management for appendicular mass and planned for interval appendectomy if recurrence occurs.

A conservative management is still a highly suitable approach for appendix mass. Detail investigating should be carried out, during the waiting period. Ultrasound is reliable and particularly helpful in women.

INTRODUCTION

An appendiceal mass is the end result of a walled-off appendiceal perforation and represents a pathological spectrum ranging from phlegmon to abscess.[1] It is a common surgical entity, encountered in 2%-6% of patients presenting with acute appendicitis.[2] Management of an appendiceal mass is controversial with three general approaches usually employed. Classical management involves initial conservative management with broad spectrum antibiotics and intravenous fluid until the inflammatory mass resolves.[3] Patients are offered interval appendicectomy following resolution of symptoms. The second approach involves performing immediate appendicectomy during the initial admission after resolution of the inflammatory mass.[1] Advocates of immediate appendicectomy mentioned advantages of avoiding the need for readmission for interval appendicectomy, and the exclusion of other pathologies masquerading as an appendix mass. The third approach involved entirely conservative treatment without interval appendectomy.[3] None of these three approaches has gained total universal acceptance. In current case report, this patient undergoes classical management and being offered appendectomy if recurrence occur.

CASE REPORT

A 26 years old female, Malay and single, was admitted to the Hospital Universiti Sains Malaysia (HUSM) with complained of abdominal pain for 1 week before date of admission. The pain started at umbilical more toward on the right side. The pain is stabbing in nature and moderate to severe intensity. The patient has history of loose stools for 4 days, low grade fever, loss of appetite and claimed lost 6 kg within 2 weeks. The patient has similar complained before past 1 year and it is being treat as gastritis. Her last menstrual period was 2 weeks ago and urine pregnancy test shows negative result. She had been diagnosed to rule out appendicular mass on admission.

On admission time patient BP 106/70 mmHg, HR 85 beat/min, and body temperature was 37°C. All laboratory value were in normal range except for WBC 11.5 x $10^3/\mu L$, which is slightly higher, the platelet count is slightly high,429 (NR 150-400) and potassium level slightly low, 3.3 (NR 3.5-4.5 mmol/L). Fluid status was keep in view.

Following day, abdominal ultrasound was done to the patient. The positive finding is the presence of fairly well defined heterogeneous mass in right iliac fossa region measured 3.6cm (AP) x 5.3cm (W) x 5.8cm (CC). Vascularity was noted and the mass was tender on probe compression. The uterus is bulky however homogenous. Kidney, uterus and liver are normal. Patient suffered from appendicular mass with possible early abscess formation as mentioned in fig 1. Another ultrasound was done to rule out ovarian mass (Fig. 2). The findings are the complex mass is separated from ovary and no gynae pathology was observed in patient.

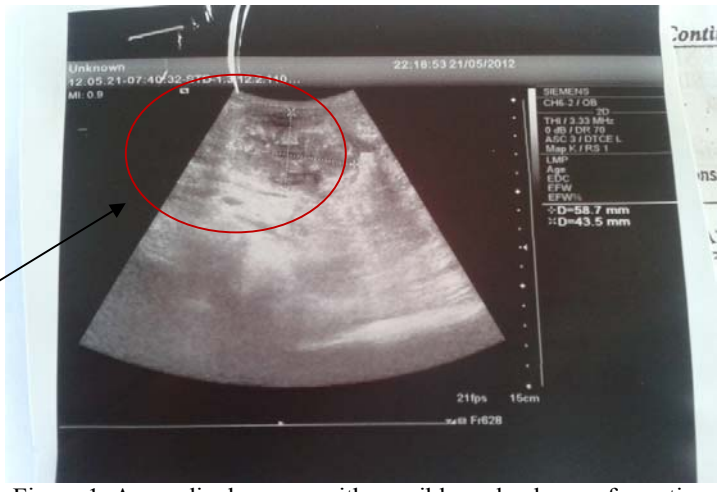

Figure 1: Appendicular mass with possible early abscess formation

Figure 2: Patient don't have ovarian mass, as Ultrasound reflecting

Table 1: Drug Prescription Pattern to the Patient

Medication and dose	Indication	Dose
IV Ranitidine	Stress induced gastric ulcer	50 mg tds
T. Ranitidine	Stress induced gastric ulcer	150 mg bd
IV Pantoprazole	Stress induced gastric ulcer	40 mg bd
IV Tramadol	Painkiller	150 mg tds
IV Cefoperazone	To treat infection	1 g stat and bd
IV Metronidazole	To treat infection	500 mg stat and tds

Drug therapy was prescribed (Table 1) to achieve complete resolution of appendicular mass and to avoid infection. Patient was discharged with advised to return after 6 months for regular follow up and if exacerbation occurred patients will be readmitted otherwise they will proceed for interval appendicectomy.

DISCUSSION

The conservative treatment comprises hospitalization, intravenous fluids, antibiotics, analgesics and a strict watch on the vitals and general state of the patient.[2] In early 20th century non-operative management for appendicular mass were preferred choice.[4] The goal of the loom was to reach complete resolution of the inflammatory mass and the

disappearance of symptoms in the patient before any surgical intervention.

Tramadol is an opiate painkiller and it can relieve moderate to severe intensity pain. Tramadol is also drug of choice among other painkiller because it has fewer side effects. Other than that, ranitidine is substituted with pantoprazole and given as prophylaxis in stress induced gastric ulcer. Pantoprazole was more effective than ranitidine in the healing rate and relief from reflux esophagitis-associated symptoms. Antibiotics along with metronidazole and analgesics were given for this patient in the ward. Same pattern were observed in published articles. [4,]

It is reported that, about 50% of patients managed conservatively, the appendix is totally cracked or atrophied (fibrosis) with obliterated lumen of the appendix.[4] Whereas, an article in favor of initial conservative approach published in 1993 by Nitecki et al, reported a mean incidence of recurrent acute appendicitis in a meta-analysis of 329 patients managed conservatively as 13.7% (range 0%-20%).[5] Most recurrences occurred within the first two years.[6] There were also fewer operative difficulties in this group of patients and there was a far less frequent need to extend the incisions during surgery. As a result of these peculiar advantages the operative time was significantly shorter than other approaches. There was also no significant postoperative complication in this group.[7,8,9]

CONCLUSION

Wrong diagnosis of appendiceal or colonic tumor can be terrible in patients with appendiceal mass and should exercise caution when follow conservative approach. To rule out proper pathologies involvement may be difficult when we adopt conservative approach without using of sophisticated investigational instruments. A conservative management is still a highly suitable approach for appendix mass. Detail investigating should be carried out, during the waiting period. Ultrasound is reliable and particularly helpful in women. Dynamic observation is an appropriate process for managing uncertain cases.

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