LETTER TO THE EDITOR

Non Surgical Management of Acute Appendicitis

Appendectomy for acute appendicitis in emergency is universally accepted and effective procedure.[1] Only in United States more than 300,000 appendicectomy are performed annually. Statistically, the life-time risk to have acute appendicitis is 8.6% in men and 6.7% in women but the risk for emergency appendectomy is 12% and 23%, respectively. Pathologically, acute appendicitis progresses invariably from mild inflammation to gangrene and perforation and as a treatment the emergency appendectomy is always required.[2] The non-operative management of uncomplicated acute salpingitis, cholecystitis and diverticulitis has been well established but the non-operative management of acute appendicitis remains controversial.[3] Some centers or surgeons use preoperative antibiotic to treat acute appendicitis in selected cases for delaying an appendectomy, particularly during twilight hours. In these cases the incidence of perforation, other complications and hospital stay especially in children operated within 6 h is equivalent to those who underwent emergency appendicectomy between 6 and 18 h after admission.[2] Literature review conclude that although antibiotics may be used as the primary treatment in acute appendicitis in selected cases, but this is treatment option is less likely to supersede appendectomy as a definitive treatment modality.[2,4] There are only one Cochrane analysis, five meta-analysis and some review article were found after extensive literature search about non-operative treatment of acute appendicitis. All these studies concludes that non operative treatment may reduce the post operative complications rate but the lower efficacy of treatment is the main concern which prevent the surgeons to adopt antibiotic therapy from being a first-hand alternative to surgery.[2,5,6] On the other hand, appendectomy may not be always necessary for the patients with uncomplicated acute appendicitis as many patients resolve spontaneously or with antibiotic therapy. Six randomized controlled trials (RCTs) have compared the efficacy of antibiotic therapy with surgery in the treatment of acute appendicitis.[2] A recent meta-analysis by Mason et al reported that the conservative management of uncomplicated acute appendicitis is associated with significantly fewer complications, better pain control and shorter sick leave. But have overall inferior efficacy due to high recurrence rate (10 – 20%) after conservative treatment.[5] Generally speaking, many of these experiences reported in literature did not receive much attention and consequently early appendectomy remained the standard treatment for acute appendicitis in order to avoid perforations or peritonitis even though population-based evaluations have reported significant long-term risks following surgical intervention for acute appendicitis.[6,7] Pisano and his colleagues reported that 1.3% individuals who had appendicectomy, require surgery due to small bowel obstruction by 30 years and that the 30-day mortality of emergency appendicectomy is 0.24% with an increased standard mortality ratio.[8] Literature review and my personnel experience concludes that the appendectomy may not be necessary for the majority of patients with acute uncomplicated appendicitis, as many patients resolve spontaneously and others may be treatable with antibiotics alone. However, the supporting documentation is scant and of low impact on this topic. A randomized, prospective trial of non-operative management versus early appendectomy of acute uncomplicated appendicitis should be conducted in our set up to review the trend of emergency appendicectomy in each case.

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