

CONSERVATIVE OR OPERATIVE MANAGEMENT (OPEN OR LAPAROSCOPIC) OF ACUTE APPENDICITIS

We read with interest the recent article on antibiotics versus appendectomy in the management of acute appendicitis.¹ A randomized controlled trial by Hansson and colleagues² with a median follow-up of 1 year reported that of 202 patients who received antibiotics, 96 (nearly 50%) were subsequently admitted for surgery. A trial by Styruud and colleagues³ reported that of 128 patients receiving antibiotics, 18 were subsequently operated (15%). All these data confirmed that it is not possible to manage all the cases of acute appendicitis with antibiotics alone.¹

The first problem in an emergency department is to establish the etiological diagnosis of inferior right abdominal pain with 1 or more associated conditions, such as leukocytosis, fever, or positive Blumberg sign. Abdominal computed tomography is recommended in patients with suspected appendicitis,⁴ but to reduce radiation exposure in younger, female and slender patients, a graded compression abdominal ultrasonography could be the first-line diagnostic test.⁴ To improve the diagnostic accuracy of ultrasonography, the combined transabdominal and transvaginal approach has been proposed in women;⁵ it has been reported that the diagnostic accuracy of preoperative abdominal–pelvic and gynecological ultrasonography evaluation in women is 96%.⁶

Once a diagnosis of acute appendicitis is confirmed, the administration of antibiotics (e.g., ciprofloxacin, cefotaxime, amoxicillin with clavulanic acid, gentamicin with metronidazole) is mandatory. Antibiotics reduce the bacterial load and can delay appendectomy or can definitively manage, in some cases, appendicitis. Patients' clinical outcomes and consent are the

main important independent variables that would address surgeon choice. At this point, nearly 85% of the patients usually require elective or emergency appendectomy, and nearly 15% are definitively treated (almost for 1 year) with antibiotics.¹ The last step is to choose among open or laparoscopic approaches. Laparoscopic appendectomy has been widely proposed in the last 20 years, but it has higher hospitalization costs than open appendectomy (US\$4000 v. US\$1500).^{6–8} The broad use of open appendectomy can reduce the annual hospitalization cost of nearly US\$765 million in the United States⁷ (nearly US\$1 billion annually if we recalculate data with the increasing cost of laparoscopy). The laparoscopic approach seems to have lower morbidity and mortality in perforated cases, and it could be recommended in children with perforated appendicitis,⁷ but a higher incidence of complications in patients with a periappendiceal abscess has also been reported.⁹ Moreover, laparoscopic appendectomy during pregnancy could be associated with a significantly higher rate of fetal loss than open appendectomy,¹⁰ but the data reported in the literature are discordant. In fact, some authors reported series without fetal loss¹¹ and some others reported series with 1 or more postlaparoscopic appendectomy fetal loss.^{10,12}

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CONSERVATIVE OR OPERATIVE MANAGEMENT (OPEN OR LAPAROSCOPIC) OF ACUTE APPENDICITIS: THE AUTHORS REPLY

We read with interest your response to our article regarding the ongoing debate surrounding the management of acute appendicitis.¹ Appendicitis remains the most common cause of the acute abdomen among young adults,