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Commentary

Commentary on “Acute appendicitis management during the COVID-19 pandemic: A prospective cohort study from a large UK centre”


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Acute appendicitis (AA) is one of the most common abdominal diseases. The frequently performed treatment is surgical. In recent years, several findings in the literature indicate the possibility of non-operative management (NOM), with the administration of antibiotics, in the uncomplicated AA. The efficacy and safety of antibiotics treatment for uncomplicated AA has been established in studies with long-term follow-up, with the majority of recurrences to occur within the first year [1].

COVID-19 pandemic has changed many therapeutic approaches. We read with interest the paper by Antakia and coworkers [2]. The authors report their experience in treating patients with AA during the COVID period. The results are interesting and the comparison with a similar pre-COVID period is very effective. The authors also report that NOM was used in 36.3% of their patients with AA in the COVID period [2]. As reported in the literature, the authors document a greater use of computed tomography (CT) scan of the abdomen during the COVID period. The authors also underline the need to perform a CT scan of the chest, for a more appropriate evaluation of patients, as suggested also for other urgent diseases [3].

We believe that evaluation with CT scan on admission of patients to hospitals is mandatory if NOM is planned. Such an approach is particularly important, as also noted in the CODA trial [4], if the participants assigned to receive antibiotics were not hospitalized. We believe that a NOM strategy may be implemented as outpatient treatment for uncomplicated CT-confirmed AA, with discharge directly from the emergency department after initiation of antibiotic treatment and control of symptoms. This therapeutic strategy based on the shortest possible stay in hospital is highly relevant during the COVID-19 crisis, as it can reduce the risk of infection and overload of hospitals already stretched by the effects of the outbreak [5].

Several studies have shown that CT-confirmed uncomplicated AA can be treated effectively with antibiotics, both in adults and in pediatric patients [4,6,7]. Approximately 80% of patients with uncomplicated AA treated with antibiotics avoid surgery during the initial hospital admission [1]. Despite the findings in the literature, the optimal antibiotic treatment has not yet been standardized [7]. A recent study

compares the clinical efficacy of an orally administered broad-spectrum antibiotic, such as moxifloxacin, and an intravenous (ertapenem) and then oral (levofloxacin, metronidazole) administration of antibiotics with greater efficacy in intra-abdominal infections [7]. In a recent trial, antibiotics were noninferior to appendectomy on the basis of results of a commonly used measure of health status at 30 days [4]. By 90 days, 29% of the participants in the antibiotics group had undergone appendectomy, including 41% of those with an appendicolith [4].

The authors clearly indicate that in the UK the therapeutic approach in patients with AA is oriented towards surgical treatment. Also, they document a greater use of open surgical treatment in the COVID-19 period.

The authors also report a higher incidence of abscesses and free fluid in the COVID period compared to patients observed in the pre-COVID period. The authors relate this finding to patients' fear of going to the hospital or to the delay in surgical treatment due to NOM failure. From the reported results it is assumed that none of the patients undergoing surgery were COVID positive. It would have been interesting to know how many COVID-19 positive patients developed AA and underwent surgery; this result is unfortunately not reported. A greater clinical severity may be related to COVID-19 infection rather than delay in treatment.

Author contributions

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