



## Letter to the Editor- Evolving Trends in the Management of Acute Appendicitis During COVID-19 Waves: The ACIE Appy II Study

Baohong Yang<sup>1,2</sup> · Mauro Podda<sup>3</sup> · Bingrong Liu<sup>1,2</sup>

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The SARS-CoV-2 (COVID-19) pandemic has had a significant impact on the management of patients with acute appendicitis (AA) worldwide. The ACIE Appy II Study showed that laparoscopic appendectomy is the first choice for the treatment of AA, while the use of NOM has declined [1].

Antibiotic treatment of uncomplicated AA faces unavoidable problems: patients with appendiceal fecaliths are at higher risk of acute peritonitis because of complications of appendiceal perforation, and the 5-year follow-up after antibiotic treatment revealed a 39.1% recurrence rate of AA [2]. In recent years, there has been controversy over the effectiveness and necessity of antibiotic treatment for uncomplicated AA. For people with a low risk of recurrent AA, supportive treatment may be sufficient and the use of antibiotics may increase the risk of drug-resistant pathogens. While for those at high risk of recurrence (e.g., with appendiceal fecaliths), antibiotic treatment of AA is ineffective and carries the risk of perforation and abscesses.

Emergency surgery has been affected at this special time of the COVID-19 pandemic, which poses a threat to the

lives of patients with AA, especially in special populations such as pregnant women or children. It is imperative to find a way to quickly relieve the cause of AA and reduce recurrence. Endoscopic retrograde appendicitis treatment (ERAT), as a novel treatment for uncomplicated AA involving colonoscopy and appendiceal lavage and/or stenting, can be a good option.

Recently, Yang et al. conducted a retrospective study comparing ERAT versus laparoscopic appendectomy (LA) for uncomplicated AA. It was found that 7.9% of patients undergoing ERAT had recurrent AA or needed surgery at 1 year, with a similar rate of adverse events to LA. Hospital stay and post-procedure pain were lower with ERAT [3].

ERAT is recommended for patients who have uncomplicated AA. We can extend the indications of this technique to specific patients who cannot tolerate surgical treatment (e.g., pregnant women, children, patients with poor conditions).

The traditional ERAT requires either X-ray or ultrasound guidance. To further streamline the procedure and reduce reliance on equipment, single digital cholangioscopy assisted ERAT has been clinically performed and offers a safe and effective alternative for the diagnosis and management of uncomplicated AA [4]. This will make it easy to implement this technique for the benefit of patients with appendicitis in areas where there is a shortage of medical facilities and medical staff, particularly during the COVID-19 pandemic. ERAT can be performed in the outpatient department with no hospitalization, which would reduce the risk of in-hospital infection or spread of COVID-19.

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Baohong Yang and Mauro Podda contributed to this work equally.

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✉ Bingrong Liu  
fccliubr@zzu.edu.cn

<sup>1</sup> Department of Oncology, Weifang People's Hospital, The First Affiliated Hospital of Weifang Medical University, Weifang, Shandong, China

<sup>2</sup> Department of Gastroenterology, The First Affiliated Hospital of Zhengzhou University, The 1st street of Jianshe East Road, Zhengzhou 450000, Henan, China

<sup>3</sup> Department of Emergency Surgery, Cagliari University Hospital "D. Casula", Azienda Ospedaliero-Universitaria Di Cagliari, Cagliari, Italy

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