Adolescent Girl with a Huge Pelvic Collection

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Case Report

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Abstract

Herein, we report our experience with an adolescent girl presenting with persistent fever, abdominal pain, and elevated levels of inflammatory blood markers. A huge pelvic collection was found at imaging studies. Occult source of infection in patients with prolonged fever and elevated levels of inflammatory blood markers must always be suspected, and in complicated cases a surgical exploration may be required.

Main Text

A 14-year-old previously healthy girl was admitted to our Pediatric Surgical Department for 10-days history of fever ($>38.5^{\circ}\text{C}$) associated with abdominal pain, vomiting and diarrhea. A blood test showed a neutrophilic leukocytosis with elevated levels of C-Reactive Protein (WBC 25000 mm³, Neutrophils 80%, CRP 206 mg/L). Physical examination revealed a soft, nondistended abdomen with localized lower quadrants tenderness. An abdominal ultrasonography (US) documented a cavity distended by superfluid material and diffuse adipose-tissue hyperplasia. This cavity persisted also after defecation. Cecal appendix could not be well-recognized at imaging. A magnetic resonance imaging (MRI) confirmed the presence of a huge pelvic collection in the hypogastrium (12x10x11 cm) with air-fluid levels [Fig 1]

Occult intra-abdominal source of infection in patients with prolonged fever, elevated WBC and CRP must always be suspected [1]. In particular, complicated appendicitis should always be taken into consideration in case of prolonged fever and persistent abdominal pain [2]. Diagnosis of appendicitis is usually based on clinical examination, but it can often be supported by abdominal US [3,4]. Notably, in complex cases, MRI may be useful to depict relevant findings for alternative diagnoses [5,6].

The patient underwent a median laparotomy, and a purulent-fecal fluid (about 400 ml) was drained from a well-organized pelvic collection secondary to a perforated appendicitis. Appendectomy was then performed. The drain output decreased about 5ml per day and, consequently, the drainage was removed 4 days after surgery. Empiric intravenous antibiotics were administered for 10 days, and the patient was discharged home on post-operative day 12 in good health status.

Declarations

Conflict of Interest Statement. The authors have no conflicts of interest related to this article to declare.

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with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Written informed consent was obtained from the individuals/legal guardians for the publication of any potentially identifiable images or data included in this article.

Authors' contributions: Dr Boscarelli and Dr Maita contributed to the conception of the study and draft the initial manuscript; Dr Duci, Dr Murru, and Dr Miglietta contributed to the acquisition of data and images; Dr Guida revised the final manuscript; Dr Schleef supervised and revised the final manuscript. All the authors approved the final version of the manuscript and attest that they meet the ICMJE criteria for authorship.

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Figures

Figure 1

Axial T2-weighted MRI image demonstrating an extensive hyperintense pelvic cavity measuring 12x10x11 cm (left), and sagittal T2-weighted MRI section showing an hyperintense fluid-filled pelvic collection with an air-fluid level (asterisk) (right).