

# A case report of retrocaecal acute appendicitis with ureteral involvement due to inflammation

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## Dear Editor,

Acute appendicitis is a frequent cause of acute abdomen in general surgery (1). The most important factor is the lumen obstruction while the most frequent reason of such an obstruction is faeces (2). As the distal end of appendix is free, different localizations may cause difficulties during diagnosis and surgery. Especially, appendicitis cases with retrocaecal extension cause challenges in diagnosis and treatment for surgeons. A 20 years old male patient applied to the emergency service with an abdominal pain starting a day before. His examination revealed tenderness, defense and rebound in right lower quadrant and suprapubic region. Other system examinations were normal. The medical history of the patient did not include any significant prior illness. White blood cell count was 17.200 mm<sup>3</sup>, CRP was 0.43 mg/dl (0-1) and full urine analysis was 173 bacteria (0-60). In radiological examinations, the patient's standing direct abdominal graph revealed no abnormality.

Abdominal ultrasound showed that the diameter of appendix was 6 mm with edema on its wall. The patient was operated with a clinical diagnosis of acute appendicitis after getting his approval. During the laparotomy performed by Mc Burney incision, it was observed that the appendix was running from the posterior retrocaecal region to the middle section of the small intestine mesentery. Appendix was dissected from the ureter, and an appendectomy was conducted (Figure1). The patient was discharged on the post-operative 2nd day.

Ureteral injuries are the potential complications of especially pelvic and gynaecological surgeries. The ratio of ureteral injuries due to abdominal surgeries ranges between 0.5 and 10% (3,4). The chance of injury is directly related with the size of the surgical procedure and the association of the disease with periureteral tissues. Ureteral injury due to appendectomy surgery is a rare complication. Laceration, compression, ischemia and thermal damage can be the reasons of ureteral injury during appendectomy. In the literature, there are studies on ureteral injury during appendectomy (5,6,7). A prominent feature of the studies in the literature is that ureteral injuries generally are detected during postoperative period. Keeping in mind the association

between retrocaecal appendicitis and ureter may prevent ureteral injury or help detecting such injuries during surgery. In appendectomy surgeries, ureteral injury is a rarely observed complication. In cases having acute appendicitis with posterior retrocaecal extension, it should be kept in mind that appendix can be associated with ureter.



**Figure 1.** Appendicitis with ureteral involvement due to inflammation

*Competing interests: The authors declare that they have no competing interest.*

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