Introduction. Acute appendicitis is the most common cause of acute abdomen, but atypical appendicitis may lead to delayed diagnosis and related complications. In this report, we present a very rare case of acute appendicitis causing right hydronephrosis.

Case Report. A 54-year-old male patient who had been receiving antibiotic therapy due to the diagnosis of urinary tract infection for the last one week but had no clinical improvement was admitted to the emergency service. Abdominal computed tomography (CT) showed right hydronephrosis and a pelvic abscess. After appendectomy and abscess drainage had been performed, hydronephrosis was completely recovered.

Discussion. The use of appendicitis scoring systems, abdominal ultrasonography (USG), abdominal CT, and diagnostic laparoscopy can be useful for the diagnostic process in patients presenting with acute abdomen. In our patient, we considered that the surgical treatment was delayed since the symptoms of acute appendicitis were suppressed by the antibiotic therapy that was being administered due to the complaints including symptoms of urinary tract infections.

Conclusion. Atypical appendicitis may cause a delay in the diagnosis of acute appendicitis and thus may lead to serious complications such as right hydronephrosis, prolonged hospital stay, increased morbidity and mortality, and increased antibiotic resistance.