Introduction: Urinary tract infection (UTI) is one of the most common infections in the geriatric population. The management of geriatric urinary tract infections is difficult due to the various factors. This study evaluated the clinical and laboratory characteristics of 101 patients who were monitored for upper UTI (acute pyelonephritis) in a tertiary care hospital.

Materials and methods: One hundred and one patients over the age of 65 years, who were monitored for acute pyelonephritis (APN) at a tertiary care hospital between January 2008 and December 2012, were included in the study. The medical charts of the patients monitored with the diagnosis of APN were retrospectively examined and the anamnesis and physical examination findings, laboratory parameters, and empirical and targeted treatments and outcomes of the patients were evaluated.

Findings: The most common symptoms in the patients were functional debilitation (32%), mental confusion (27%), and emesis (26%) while the most frequent physical examination findings were fever (57%), costovertebral angle tenderness (CVAT) positivity (42%), and tachycardia (27%). The most frequently isolated microorganism from the urine cultures was E. coli (66%).

Conclusion: In conclusion, APN is an infectious disease that is common in the elderly population and can result in death. It should be remembered that the typical symptoms and signs of infection may not be present in elderly patients with APN and that these patients may present with atypical findings such as mental confusion and functional debilitation. The increase in antibiotic resistance in E. coli strains limits the treatment options and once more reminds us, the clinicians, of the importance of rational antibiotic use.

Key words: Acute pyelonephritis, elderly population, antibiotic resistance.