## Characteristics of Acute Bacterial Prostatitis in Elderly Patients Attended in the Emergency Department

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Abstract: Objective: To analyze the characteristics of acute bacterial prostatitis (ABP) in elderly patients attended in the emergency department (ED). Methods: Observational and cohort study with prospective follow-up including patients with ABP presenting to the ED from January-December 2012. Data were collected for demographic variables, comorbidities, clinical and microbiological findings, treatment, outcome, and reconsultation at 30 days follow up. Findings were compared between patients ≥ 75 years (study group) and < 75 years (control group). Results: During the study period 241 episodes of ABP were included for analysis. Mean age was 62,9 ± 16 years, and 64 (26.5%) were ≥ 75 years old. A history of prostate adenoma was reported in 54 cases (22,4%), diabetes mellitus in 47 patients (19,5%) and prior manipulation of the lower urinary tract in 40 (17%). Mean symptoms duration was  $3.38 \pm 4.04$  days, voiding symptoms were present in 176 cases (73%) and fever in 154 (64%). From 216 urine cultures, 128 were positive (59%) and 24 (17,6%) out of 136 blood cultures. Escherichia coli was the main pathogen in 58.6% of urine cultures and 64% of blood cultures (with resistant strains to fluoroquinolones in 27,7%, cotrimoxazole in 22,9% and amoxicillin/clavulanic in 27.7% of cases). Seventy patients (29%) were admitted to the hospital, and 3 died. At 30-day follow-up, 29 patients (12%) returned to the ED. In the bivariate analysis previous manipulation of the urinary tract, history of cancer, previous antibiotic treatment, resistant E. coli strains to amoxicillin-clavulanate and ciprofloxacin and extended spectrum beta-lactamase (ESBL) producers, renal impairment, and admission to the hospital were significantly more frequent (p < 0.05) among patients  $\geq$  75 years compared to those younger than 75 years. Conclusions: Ciprofloxacin and amoxicillin-clavulanate appear not to be good options for the empiric treatment of ABP for patients ≥ 75 years given the drug-resistance pattern in our series, and the proportion of ESBL-producing strains of E. coli should be taken into account. Awaiting bacteria identification and antibiogram from urine and/or blood cultures, treatment on an inpatient basis should be considered in older patients with ABP.

**Keywords:** acute bacterial prostatitits, antibiotic resistance, elderly patients, emergency **Conference Title:** ICEM 2017: International Conference on Emergency Medicine

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