

Session: EP192 Urinary tract infections: current issues

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## Is acute focal nephritis an upper urinary tract infection with proper clinical entity?

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**Background:** Unlike uncomplicated pyelonephritis, except for pediatric population, data related to the clinical-epidemiological spectrum of acute focal nephritis is scarce. Our objective is to analyse clinical, epidemiologic and prognostic characteristics of acute focal nephritis (AFN) compared to acute pyelonephritis (AP).

**Material/methods:** Descriptive, retrospective, cross-sectional study which included 495 patients older than 14 years, diagnosed with AP based on IDSA criteria, in a tertiary hospital between January 2009 and December 2014. AFN were considered in patients diagnosed of AP with focal lesion in abdominal ultrasound or CT. Patients with renal abscess or ectasia > grade II were excluded. All AFN patients were treated for a period equal to or greater than 21 days.

**Results:** 60 patients (12,1%) had AFN. The age was  $41,1 \pm 19,6$  years, 49 cases (81%) were women, 48,3% had functional or structural urologic abnormalities, 33% previous episode of urinary tract infection, 10% were immunosuppressed, 5% had Diabetes, 3,3% cancer. The infection was community acquired in 98,3% and in 67,4% was a first episode of AP. The duration of symptoms was  $5,35 \pm 5,5$  days, 95% had fever, 84% chills, 80% flank pain and 61,7% mictional syndrome. 15% had bacteremia and 60% had and urine culture positive. *E. coli* was the causal agent in 86,1%. Abdominal ultrasound test was pathologic in 60% and abdominal CT in 95,5%. Nephrostomy was necessary in 6,7% of patients and 8,3% had septic shock. AFN were more common in female sex (OR 2.37, 95% CI 1.07-5.26), age (OR 1.01, 95% CI 1.0-1.03), flank pain (OR 2.34, 95% CI 1.06-5.18), days in reaching apirexy (OR 0.85, 95% CI 0.75-0.96) and Diabetes (OR 0.75-0.96, 95% CI 0.06-0.73).

**Conclusions:** Prevalence of AFN is high. It is significantly more frequent in young women, without urological subyacent pathology or Diabetes Mellitus, as a first episode. We should perform image test to exclude focal complications in the form of AFN in patients who experience mayor delay in reaching apirexy and flank pain.