

## Clinical Significance And Antimicrobial Susceptibility of *Aerococcus* Spp

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**Background & Objectives:** *Aerococci* are gram positive cocci,  $\alpha$ -hemolytic. They are resemble those of enterococcus and viridians streptococcus. Genus *Aerococcus* contain five species: *A. viridians*, *A. urinae*, *A. sanguinicola*, *A. christensenii*, *A. urinaehominis*, that are found in the environment, usually in water, dust, vegetation and meat product. *Aerococci* have been isolated from patients with a number of clinical conditions, including endocarditis, bacteremia, meningitis, septic arteritis, wound and urinary tract infection. The aim of this study was to determine frequency of *Aerococci* in uti.

**Methods:** 80 isolates of non-enterococcal streptococcal species obtained from urine culture. All strain were characterized using phenotypic approach: catalase, hemolysis gram staining from thioglycolate, growth on BEM, 6.5% NaCl, hippurate hydrolysis, susceptibility to vancomycin, VP, ONPG and susceptibility to antimicrobial agents.

**Results:** between March 2010 and 2011, 3 cases (3.75%) *Aerococci* were recovered from uti. Although molecular Methods needs for confirmation, but it seems one strain was *A. urinea* and 2 *A. viridians* and *A. sanguinicola*. All species were susceptible to Amoxycillin, Cephalosporins, Penicillin, Ciprofloxacin. *A. urinae* were resistant to Co-trimoxazole.

**Conclusion:** Infection usually occur in patients with underlying disease in this study all patients were men > 50 years old. One had kidney graft, one, chronic prostatitis and one uti. The identification and treatment of this bacteria should be noted.

**Keywords:** Clinical Significance; *Aerococcus* Spp; Antimicrobial Susceptibility