

EV0594

ePoster Viewing

Emerging infectious diseases

**"Frequency and susceptibility testing of *Neisseria gonorrhoeae* strains isolated from urethral samples in a tertiary hospital in Greece during January 2009 – September 2014"**

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**Objectives:** To study the frequency of *N.gonorrhoeae* strains isolated from urethral swabs of men who were examined in the emergency department of our hospital with symptoms of acute urethritis and their susceptibility testing, over a period of 69 months, in a tertiary hospital of Athens

**Methods:** Urethral samples from 366 patients with urethral secretion were sent to our laboratory for culture. Chocolate agar, blood agar, MacConkey II and Thayer-Martin agar were used for the culture. The isolated strains were identified by the use of conventional methods and by API NH (bioMerieux). Susceptibility testing was performed by Kirby-Bauer method, according to CLSI instructions.

**Results:** Each sample concerned one patient. *N.gonorrhoeae* strains were isolated from 74/366 urethral samples (20.2%). Foreign patients with gonococcal urethritis were 18/74 (24.32%) while native patients were 56/74 (75.6%). During the study period, the number of isolated strains varied a lot per year with: 8 stains in 2009, 17 in 2010, 10 in 2011, 15 in 2012, 6 in 2013 and 18 until September of 2014. Susceptibility was tested in four antibiotics: penicillin (PEN), tetracycline (TET), ciprofloxacin (CIP) and ceftriaxone (CRO). The strains were found to be resistant in PEN 61%, TET 38% and CIP 60%. All of the strains were susceptible to CRO. The resistance, also, varied through the study years but a certain increase of it was observed from 2009 to 2014 to: PEN 12,5%-53% , TET 12,5%-23% and CIP 25%-59%, respectively, with 2011 presenting the highest resistance (PEN 80%, TET 70%, CIP 70%)

**Conclusions:** Urethritis due to *N. gonorrhoeae* observed in our study was ~20%. Recorded resistance to penicillin, tetracycline and ciprofloxacin was high. Ceftriaxone remains the best empirical treatment. Surveillance of resistance of *N. gonorrhoeae* seems to be a necessity, as well as the implementation of prevention control measures for the spread of the disease.