Evaluation of Gonococcal Resistance in Austria Update 2011

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Background
- Increasing number of gonococcal infections
- High level of QRG
- Increasing number of cases of treatment failure with cefixime
- International appearance of GC-isolates resistant to cephalosporines and azithromycin

Reported Cases of Gonorrhea in Austria 1990 – 2011

Objectives
- Constitution of a national network
- Collection of gonococcal isolates and corresponding anamnestic data
- Evaluation of resistance patterns of Neisseria gonorrhoeae using different methods

Methods
- Culture – Transport - Storage
  - Material from various swabs taken in each centre
  - Original culture on different media, 24 – 48 h, 37°C, CO₂-atmosphere, in each institute
  - Packing and shipping according to EU-guidelines
  - Storage of all isolates at -70°C in the Outpatient’s Centre, Vienna

Results
- 2011: > 50 % of GC-isolates are resistant to penicillin (agardiffusion)
- 2011: about 60 % of N. gonorrhoeae strains are resistant to tetracycline, 8 % TRNG (MIC > 8 µg/ml)
- Spectinomycin: almost 100 % of the strains are susceptible
- MIC values for gentamicin range from 2 – 8 µg/ml with a peak at 4 µg/ml (≤ 75 %)
- Increasing MIC for both, cefixime and ceftriaxone (Fig.)
- Azithromycin resistance: 2010: 1 %, 2011: 1.5 % (Fig.)

Conclusion
- Microbiological diagnosis including culture and resistance pattern is essential for successful therapy
- Cephalosporines – most appropriate drug
- CAVE: international increase of MIC
- Alternative therapy: azithromycin resistance in Austria still low (< 2 %)
- Change to multiple drug therapy ?
- Continuous monitoring of resistance patterns of N. gonorrhoeae is important for successful therapy!