



POSTER PRESENTATION

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A prospective project of microbiological surveillance at a teaching Hospital in Italy; evolving epidemiological features, and in vitro antimicrobial sensitivity trends

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Background

An active bacteriological surveillance project is part of the mandatory knowledge on the local microbial isolation and their antimicrobial resistance pattern.

Methods

The trend of microbial isolations from patients admitted in the last year 2008 (January 1, 2008-December 31, 2008) at our Hospital is reported on quarterly basis, together with updated antimicrobial sensitivity testing.

Results

As a whole, Gram-negative agents showed an increasing trend of isolation, regardless of the examined clinical specimens, while the epidemiology of Staphylococci remained somewhat unchanged, and their methicillin resistance rate remained under control (around 39% of overall isolates from blood cultures). When considering Enterococci, the active surveillance of VRE strains successfully acted against the potential nosocomial spread of these organisms: the only 7 cases of "Van A" *Enterococcus faecalis* strains were not related with each other, and glycopeptide resistance remained limited to less than 3% of overall Enterococci. An increasing number of ESBL-producing Enterobacteriaceae was noticed (with a 29-36% quarterly rate for *Escherichia coli*, and up to 41% for other organisms, as a whole). The overall resistance rate against fluoroquinolones is on steady increase: the last quarterly report shows a 47.3% rate for *E. coli*,

30.8% for Enterobacteriaceae, and 42.6% for *Pseudomonas aeruginosa*.

Discussion

An active, prospective microbiological monitoring may significantly add to the knowledge of local epidemiological figures and antimicrobial sensitivity trends, and plays a role of paramount importance when selecting and planning chemoprophylaxis and therapeutic strategies, on a local and regional basis.

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