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Antimicrobial resistance pattern of gram-negative bacteria of nosocomial origin at a teaching hospital in the Islamic Republic of Iran

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Background and Aims: The emergence of antimicrobial resistance is a global problem in the community and in hospitals.
Methods: Antibiotic resistance of Gram-negative bacteria from nosocomial infections were evaluated during a 6-month period at Shariati teaching hospital, Tehran, Islamic Republic of Iran. Susceptibility tests were performed on 570 Gram-negative isolates obtained from clinical samples of patients infected after at least 72 hours stay in the hospital.
Results: Escherichia coli was the most frequently isolated Gram-negative organism (42.6%). The highest rate of resistance in Gram-negative isolates was seen in the intensive care unit, with Acinetobacter spp. as the most resistant organisms. Gentamicin was the most effective antibiotic against E. coli and all other isolates, while ciprofloxacin was also effective against a wide range of other species.
Conclusions: Antibiotic resistant Gram-negative nosocomial infection is prevalent in this teaching hospital in Tehran. Full text of this abstract is published in the “Eastern Mediterranean Health Journal” and is available online.

Keywords: Antimicrobial; Resistance; Gram-negative; Nosocomial