Prevalence of metallo-β-lactamase producing bacteria in intensive care unit in Thi-qar province, Iraq

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To identify the bacteria that producing the enzyme of metallo-β-lactamases (MBLs) with (E test) method among patients of intensive care unit this study had been conducted in Al-Imam Al-Husse hospital in Thi-qar province for the period from 1st September to end of December 2011. A total of 320 swabs and samples were collected from 17 different sites of Intensive Care Unit environment and inoculated on a normal cultural media, then incubated at 37°C for 24 hour. The growth revealed different bacterial colonies which had been tested for their morphological and biochemical characteristics. The final diagnosis by using API20 E was used for the gram negative bacteria and API staph. Used for Staphylococcus. Sixty eight of pure isolates were obtained including 24 (35.29%) Gram positive bacterial isolates, 44 (64.71%) of Gram negative bacterial isolates. Sensitivity tests for all isolates were done using 25 types of commonly used antibiotics in Iraq, the results revealed that the genus Enterobacter spp. had a high resistance as a Gram negative bacteria and Staphylococcus spp. had a high resistance as a Gram positive bacteria to most of the tested antibiotics. The ability of bacteria isolates to produce Metallo ß-lactamase using progressive concentration stripes method (E test) was studied. The results showed (1.4%) of these isolates gave positive results for each Pseudomonas aeruginosa, Enterobacter cloacae and Proteus mirabilis.

Biography
Ali Taher Abbas is currently working at College of Pharmacy, Univ. of Thi-Qar, Iraq.

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