P1989

Abstract (poster session)

Withdrawal of Staphylococcus aureus from intensive care units in Turkey

H. Erdem, M. Dizbay, S. Karabey, S. Kaya, L. Gorenek* on behalf of the ICU infections study group

Background: Since the advent of antibiotics Staphylococcus aureus infections displayed various epidemiological curves in the hospitals and in the ICUs. Thus, we wanted to disclose the current trend in a nationwide survey in the ICUs in Turkey. Methods: Overall, 28 university, and eight training hospitals reaching a sum of 36 Turkish tertiary centers have joined in this study. Overall 88 ICUs were included. This retrospective study was performed in the first three months (January 1st - March 31st) of 2008 period (P1) and 2011 (P2). Subsequently these two periods were compared. P values of <= 0.01 were considered significant. Results: The hospital-acquired infection (HAI) rate in P1 was (2164/67068) x1000=32.3 and (2276/75800) x1000=30 in P2 (p=0.01656). The share of S. aureus was 15% (n=284) in P1 and 7.3% (n=172) in P2 (p<0.0001). Accordingly, the share of methicillin resistant S. aureus (MRSA) isolates was 12.7% (n=241) in P1 and 5.5% (n=128) in P2 (p<0.0001). No statistical significant difference was detected for Pseudomonas aeruginosa, enteric Gram-negatives, coagulase-negative staphylococci, enterococci or Candidas, but the Acinetobacter. The share of Acinetobacter isolates was 21.9% (n=414) in P1 and 28.6% (n=671) in P2 (p<0.0001). The rate of HAIs due to S. aureus was (284/67068) x1000=4.23 in P1 and (171/75800) x 1000=2.25 in P2 (p<0.0001) and for MRSA the HAI rate was (241/67068) x1000=3.59 in P1 and (128/75800) x 1000=1.68 in P2 (p<0.0001). Conclusions: Our data disclose that S. aureus either methicillin resistant or on the whole, is withdrawing from the scene in the ICUs in Turkey and it seems that a microbial shift towards Acinetobacter takes place.