LETTERS TO THE EDITOR

Pattern of Nosocomial Infection in Two Intensive Care Units of a Tertiary Care Hospital in Karachi

Dear Sir,

This is with reference to an article titled “Pattern of Nosocomial infection in two intensive care units of a tertiary care hospital in Karachi” published in JCPSP March 2007: Vol.17 (3): 136-139.

The authors have made good efforts in highlighting the importance of nosocomial infections and studying the pattern of pathogens involved and their antibiotic sensitivity patterns, but I have few observations to report in the article.

1. One of the objective of the article was to determine the pathogens involved and finding the antibiotic sensitivity patterns. This objective demanded that standard microbiological techniques are followed in culturing the specimen provided and antibiotic sensitivities of the isolates are carried out as per standards laid down by National Committee for Clinical Laboratory Standards (NCCLS). As such there is no mention of the techniques and procedures involved in materials and methods.

2. In Table IV, containing pattern of antibiotic sensitivity to MRSA. The Maxipime, Imipenem, Tazocin and Ceftazidime have been shown to be sensitive in 72.7%, 68.2%, 63.6% and 45.5% of the MRSA isolates. By definition, Methicillin resistant Staphylococcus aureus (MRSA) isolates are resistant to all the B lactam antibiotics irrespective of in vitro zone of inhibition. Therefore, assuming that these isolates (n=23) were MRSA then they should have been reported 100% resistant to the above-mentioned antibiotics.

3. In order to label the isolate of Staphylococcus aureus as (MRSA), there are certain procedures and techniques involved. This includes using 1 µg oxacillin disc (Oxoid), using Mueller-Hinton agar (Oxid) containing 4% sodium chloride and incubation of culture plates at 35°C for 24 hours. The susceptible zone diameter are then interpreted as per NCCLS criteria. I am afraid none of these techniques have been mentioned in materials and methods.

4. Again in Table IV containing pattern of antibiotic sensitivity to Pseudomonas aeruginosa. Vancomycin has been tested whereas Ceftazidime has not been used. Vancomycin has not anti-pseudomonal activity whereas Ceftazidime is a potent anti-pseudomonal third generation cephalosporin. Similarly, 84.2% and 78.9% of Pseudomonas aeruginosa isolates have been shown to be resistant to Imipenem and Tazocin respectively, which is extremely high rate of resistance. Piperacillin/Tazobactam (Tazocin) particularly has a very high sensitivity rate against Pseudomonas aeruginosa all over the world and also reported in various international studies.

REFERENCES


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