

THE COMPARISON OF EFFICACY OF TOPICAL NASAL MUPIROCIN AND SINGLE DOSE ORAL CIPROFLOXACIN IN TREATMENT OF STAPHYLOCOCCUS AUREUS CARRIERS

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AIM: Staphylococcus aureus is one of the most important pathogens that colonize in the nasal environment and carriers can increase the incidence of nosocomial infections. This study was designed to compare the efficacy of the two antimicrobial regimens (topical nasal mupirocin and oral ciprofloxacin) in the treatment of staphylococcus aureus carriers. The recurrence rate after treatment was estimated.

METHOD: This trial was performed by culturing nasal secretions of 366 health care workers of Valiasr Hospital in Iran. Carriers were detected (45) and divided into two groups (A, B). Group A was treated with single dose of oral ciprofloxacin (1500 mg) and vitamin A and D ointment (as placebo) twice a day and the group B patients were treated with a single oral dose of placebo accompanied by nasal mupirocin ointment twice a day. After a 5 day period, nasal cultures were reformed in both the groups and 5 weeks later nasal cultures were done to evaluate the recurrence rate.

RESULTS: Among 366 health care workers, 45 (12.9%) persons were nasal carriers of staphylococcus aureus. The efficacy of the second regimen (group B) was much better than the first regimen (group A) ($p = 0.019$). Recurrence rate did not significantly differ between the two groups. ($p > 0.05$)

DISCUSSION: Topical mupirocin therapy is more effective than single dose oral ciprofloxacin, although the risk of recurrence was not significantly different between the two groups.

CONCLUSION: Physicians should be aware of the efficacy of topical mupirocin in the treatment of staphylococcus aureus carries and this may decrease the inappropriate use of antibiotics and the incidence of antibiotic resistant microbial infections.

Key words: staphylococcus aureus carriers, mupirocin, ciprofloxacin