

Residual Study of Ox Bio Shield Efficacy

Background

Hands are among the principal vehicles for transfer of infectious agents. Proper hand hygiene has been proposed as the main means of preventing nosocomial spread of pathogens in the hospital setting and community. The aim of the study was to evaluate the efficacy of Ox Bio Shield - Hand Rub for continuous 8 hours.

Method

Hands were washed for 1 min with soap. The bacterial pre value was obtained by adding 10µl of sample containing approx. 10000 bacteria (*Staphylococcus aureus* ATCC 25923) in the palm area. After 5 minutes of contact, the residual bacterium was eluted with the use of pre-moistened swab and plated directly onto TSA medium. Hands were washed and applied with Ox Bio Shield hand rub. The bacterial challenge test was repeated after treatment 2, 4, 6 and 8 hours respectively.

Result

The results were tabulated as follows:

Time (hours)	Microbial load
Before Treatment	Growth (+++)
After Treatment 2 hours	No Growth
4 hours	No Growth
6 hours	No Growth
8 hours	No Growth

After incubation, pictures were taken and the bacterial growth was graded as: "No growth" and "Growth +++ (Confluent)". A 6 log reduction was observed in 5 minutes.

Conclusion

This study found that Ox Bio Shield – hand rub provided significant antimicrobial efficacy and may help improve the hand hygiene by reducing bacterial load continuously for 8 hours.

