ABSTRACT BOOK ABSTRACTS



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ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

## **"ISOLATION OF MICROBIAL AGENTS IN ACNE VULGARIS AND PREVALENCE OF ANTIBIOTIC RESISTANCE AMONG CASES OF PAPULOPUSTULAR ACNE VULGARIS"**

Deepti Shukla<sup>(1)</sup> - Rachita Dhurat<sup>(2)</sup>

Ltmmc & Ltmgh, Dermatology, Mumbai, India<sup>(1)</sup> - Ltmmc & Ltmgh, Dermatology, Mumabi, India<sup>(2)</sup>

BACKGROUND: Acne vulgaris is one of the most common skin disorders in young adults. The widespread and long-term use of antibiotics in the treatment of acne has resulted in the spread of resistant bacterial strains. we conducted this study with the aim and objective of identification of microbial agents in acne vulgaris and prevalence of antibiotic resistance among cases of papulopustular acne and to determine correlation between clinical response and profile of antibiotic susceptibility

METHODS : Samples were collected from 110 acne patients. All samples were cultured in aerobic and anaerobic conditions, and final identification of isolates was performed. Isolates were then subjected to antimicrobial susceptibility tests using erythromycin, clindamycin, tetracycline, doxycycline, and minocycline. Clinical response to antibiotics was evaluated at the end of 4 weeks.

RESULTS: Most commonly found organism were Propionibacterium and staphylococcus epidermidis. The antibiotic susceptibility patterns of P. acnes and staphylococcus epidermidis to the different antibiotics were compared between the patients; subgrouped according to their age (< 20 years and 20 years or more), disease duration (< 2 years and 2 years or more). Maximum resistance was found against azithromycin. On clinical correlation, group of patients with predominant staphylococcus epidermidis isolates, even resistant cases showed clinically significant improvement whereas in the group of patients with predominant cases did not show clinically significant improvement after 4 weeks of antibiotic therapy.

CONCLUSION: Despite the development of resistance, the patient showed clinical improvement. This may either indicate that Staphylococcus epidermidis is not directly involved in pathogenesis of acne vulgaris or patient responded clinically due to anti inflammatory effect of antibiotics or possibly intrafollicular concentration of antibiotics exceeds the level required for improvement





