

THE STUDY ON THE PREVALENCE AND SOME FACTORS RELATED TO ANTIBIOTIC RESISTANCE OF PROPIONIBACTERIUM ACNES AT CAN THO HOSPITAL OF DERMATO-VENEREOLOGY

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ABSTRACT

Background: Acne is an inflammatory disease of the hair follicles. There are many treatments from medication to non-medication in which antibiotics are a widely used and effective group. However, the recent overuse of antibiotics has led to an increase in resistance to drugs by *P. acnes*. Therefore, this study is extremely necessary. **Objectives:** To determine the antibiotic resistance rate and a number of factors related to *Propionibacterium acnes* antibiotic resistance rate in acne patients at Can Tho Hospital of Dermato-Venereology. **Materials and methods:** the cross-sectional descriptive study was carried out on of 43 acne patients at Can Tho Hospital of Dermato-Venereology. **Results:** resistance rates for antibiotics were cefuroxime (91.7%), ceftriaxone (87.5%), cefotaxime (87.5%), trimethoprim (85.4%), clindamycin (66.7%), ofloxacin (41.7%), ciprofloxacin (25%), levofloxacin (20.8%), tetracycline (16.7%). All patients participating in the study were resistant to at least 2 or more antibiotics of which the highest resistance level was 6 antibiotics (37.5%). Some related factors such as the history of antibiotic treatment accounted for 35.4%. Severity levels were classified into mild acne 60.1%, average 27.1% and severity 12.5%; there were two clinical forms in our study including acne vulgaris (77.1%) and cystic acne (22.9%). However, when examining the relationship between these factors and antibiotic resistance, this difference is not statistically significant. **Conclusion:** *P. acnes* are increasingly resistant to many antibiotics, making treatment more difficult, a number of factors related to this condition for example antibiotic use, level of severity of acne.

Keywords: Acnes, *Propionibacterium acnes*, antibiotic resistance