The Survey of Microbiological Contaminations in Non-antibiotic Ointment Products in Taiwan

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ABSTRACT

Non-antibiotic ointments can easily be purchased from the drugstores or hospitals for wound treatment even without the prescription of physicians. If they are microbiologically contaminated due to the incomplete sterilization during manufacturing, it will result in the infectious wounds of the users. In this study, we initiated the first investigation on the microbiological quality of non-antibiotic ointment products in Taiwan market. Using the methods described by Chinese Pharmacopoeia, we conducted the tests for the sterility and the microbial limits, including the total viable aerobic counts, and the detection of Pseudomonas aeruginosa, Staphylococcus aureus, Escherichia coli and Salmonella species. About 62 samples (from 40 different kinds of products) were collected from local drugstores and hospitals in different Taiwan areas. Our results demonstrated that all the samples met the requirements of the sterility and the microbial limits described in European Pharmacopoeia (2002). None of the pathogens were detected in either domestic or imported non-antibiotic products.

Key Words: non-antibiotic, ointment, microbial limits, sterility test.