

## The Sterility Survey of Ethylene Oxide Sterilized Gauzes and Cotton in Taiwan

SHU-CHING FU, YI-CHEN YANG, TSO-LING CHEN, HWEI-FANG CHENG,  
CHIA-PO LIN AND CHUN-HENG LIAO

Division of Pharmacobiology

### ABSTRACT

Sterilized gauzes and cotton are not only used in the hospitals, but also at home. They might cause infection if they are not sterilized completely. According to the result of the survey done by NLFD in 1996, all of the unqualified gauzes and cotton were sterilized by ethylene oxide. Further, we conducted an investigation in 2000 on the gauzes and cotton sterilized by ethylene oxide. There was 24.1 % of samples that were not qualified. In order to understand the quality of ethylene oxide sterilized gauzes, 72 samples (37 gauze samples and 35 cotton samples) were randomly sampled from 21 hospitals, 12 medical instrument corporations, 11 pharmacies, 6 companies and 1 blood bank in Taiwan during April and June of 2001. The sterility test was conducted according to the procedures of direct transfer method as described in the fourth edition of Chinese Pharmacopiea and USP 24 edition. Our results showed that 1 gauze sample (2.7 %) and 6 cotton samples (17.1 %) of the 72 samples did not meet the requirement of the sterility test in this study; 9.7 % of the samples were not qualified. The sterility quality of commercial gauzes and cotton sterilized by ethylene oxide in 2001 was improved significant to compare with the result of 2000.

Key Words: ethylene oxide sterilized, Gauze, Cotton , Sterility test