Chapter V

CONCLUSION

The proposal of this study was to test effectiveness of the preservatives used in ophthalmic solutions that have been used in Thailand. It was found that all samples used in this study were well preserved, eventhough in the samples diluted to 1:10 dilutions. It seems that these preparations were prepared in which preservatives used were in extent amount that the products can be sterile all the times even during use by patients. In other view, other compositing redients in the preparations must be considered. These ingredients may affect the effectiveness of preservatives in dosage forms. Some substances may result in improper conditions for growth of microorganisms.

In this study, the tests were performed with 50 samples of ophthalmic solutions marketed in Thailand, including local made and imported products. The first 23 products tested were eye drops with antimicrobial agents. These products have to be tested for efficacy to microorganisms, whether or not the preservatives are included. Products with antimicrobial agents may have self-sterilized properties to some contaminating organisms, but may not cover all kinds of contaminants. In the later case, preservatives may be needed.

From the results obtained in this study, the conclusion is

that preservatives activity of ophthalmic solutions marketed in Thailand, which were tested, are effective. And the concentrations of preservatives used may be lowered while the effective properties are maintained.

