

## Chapter VI

### Conclusion

From all the results obtained in the present study, the use of liquid media for culturing *M. tuberculosis* from liquid exudate were in accordance with conventional method. All four liquid specimens which were positive for *M. tuberculosis* using L-J media were also positive with liquid media method. But the liquid media method showed positive results in other four cases or 100 % more efficient than L-J media. In addition it was clearly shown that culture using liquid media could give positive result in the shorter period of incubation time. We strongly recommend that the liquid media method must be added in routine laboratory method in the diagnosis of tuberculosis where large volume of liquid exudate is available for culture.

It was also clearly demonstrated that the commercial liquid medium used in the study could give better result than the developed liquid medium which was newly developed for this study. In any laboratory where financial status is not an important problem and culture of liquid exudate for TB are frequently performed such that the commercial enrichment is used before its expired date, commercial liquid media should be used. However when we consider about the simplicity of self preparation of enrichment medium and the cost of the preparation, the developed liquid medium may be preferable in many TB laboratories in Thailand. Unfortunately, the efficacy of newly developed medium is just slightly (25%) better than L-J medium and is much less efficient than the commercial liquid medium in term of positivity

and recovery rates. Therefore, further study is needed to search for any important nutrient factors which enhance the efficacy of TB isolation of liquid media. Also the study to find the decisive factors which render commercial liquid media more efficient than locally prepared medium, should be carried out.

In conclusion, our study just proves that liquid media is another efficient way to demonstrate the presence of tubercle bacilli in liquid exudate and much more useful than conventional media. Eventhough, the efficacy of the developed liquid medium was less than that of the standard liquid medium but the results obtained from this study would provide useful informations for further study in this aspect.



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