

## CHAPTER 7

### CONCLUSION

Thirty sera from healthy individuals, fifteen sera from HIV – infected patients with oral candidiasis (HOC), five sera from systemic candidiasis patients and nine sera from other fungal infection patients were recruited to determine the levels of immunoglobulin G antibody against mannoprotein antigen by using ELISA. In this study, the optimal concentration of mannoprotein antigen is 12.5 µg/ml (protein concentration = 8.8 µg/ml). The IgG antibody against mannoprotein antigen was detected with various dilutions, mode of antibody titer (and frequency rate) in healthy individuals, HOC and other fungal systemic infection patients are 1:100 (53.33%), <1:100 (66.67%) and <1:100 (44.4%), respectively whereas in the systemic candidiasis patients was 1:400 (60%). The mode of levels systemic candidiasis are higher than other groups. The mannoprotein antigen (protein concentration = 14.28 µg/ml by protein assay) was identified by Western blot analysis. The optimal dilution of rabbit anti – human IgG conjugated with horseradish peroxidase is 1:500. Twelve protein components are appeared on the gel and membrane, 52, 50.5, 46.5, 45.5, 43.5, 42, 38, 36.5, 32.5, 29, 25, and 22.5 kDa. Twelve protein components found in almost all sera. To simplify the results, these antigenic components are categorised into 15, 12, 5 and 9 patterns in healthy individuals, HOC, systemic candidiasis patients and other fungal infection patients, respectively. Eight sera from healthy had no detectable antibody patterns. The favorable antibody pattern in healthy individual is pattern no. 15 ( reacted with 46.5 and 43.5 kDa ) and in HOC is no. 12 (reacted with 46.5, 43.5 and 36.5 kDa). For the systemic candidiasis patients and other fungal infection patients had no the favorable antibody pattern. The protein components with molecular weight 46.5, 43.5 and 36.5 kDa were frequently detected in all test groups. Especially, the protein component with molecular weight 46.5 kDa shows frequency rate is very high in all group