



Graves' disease (n=15) and euthyroid subject (n=291) respectively. The correlation of TRAb and hyperthyroidism was 80.1% with a sensitivity and specificity of 81.7% and 97.3% respectively. Comparative studies of TRAb-ELISA and TBII receptor assay showed that the concordance of the two assay was 80% (n=100). Analysis of TRAb in follow up cases of antithyroid drug treated Graves' disease showed that the TRAb declined to normal range if the treatment was effective. The TGAb-ELISA and MCAB-ELISA developed showed concordance of 85.7% and 78.3% to the thyroglobulin haemagglutination (THYMUNE-T, Wellcome) and microsome haemagglutination (THYMUNE-M, Wellcome) tests respectively. Eye muscle autoantibodies (EMAb) which play a role on the pathogenesis of ophthalmopathy were analysed in 127 sera by EMAb-ELISA developed. EMAb were found positive in 93.5%, 80.8%, 85.7% and 6.3% in untreated Graves's ophthalmopathy (n=31), Graves' hyperthyroid (n=26), euthyroid Graves' disease (n=7) and euthyroid subjects (n=63) respectively. The correlation of EMAb and ophthalmopathy was 58.7% with a sensitivity and specificity of 92.1% and 71.9% respectively. Autoradiograph of radioimmunoprecipitation and immunoblotting of Graves' sera showed that the TSH receptor have a molecular weight of about 70-80 Kd.