梅毒의 血清學的 診斷*

1. VDRL과 Microhemagglutination Assay for Treponema Pallidum (MHA-TP)성績의 比較觀察

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Abstract=

Serodiagnosis of Syphilis

1. Comparison of Venereal Disease Research Laboratory (VDRL) Test with Microhemagglutination Assay for Treponema Pallidum (MHA-TP)

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The serodiagnostic test of syphilis employed with the greatest frequency in this country is the VDRL procedure which is one of the flocculation test utilizing cardiolipin-lecithin as an antigen. As well known, the immunologically nonspecific nature of this test relegates it only to screening test, so that all the sera displaying weakly reactive or reactive VDRL in the absence of definite evidence of present or past syphilis should be confirmed by using the specific treponemal antigen tests. However, there are only limited numbers of institutions at which the specific treponemal antigen tests are carried out, because the tests usually need quite complicated technology and specifically trained personnel.

The Treponema pallidum hemagglutination assay (TPHA) which was first described by Rathlev in 1965 and established as more improved and standardized procedure in serodiagnosis of syphilis by Tomizawa and Kasamatsu (1966) has been found to be as sensitive and specific as the technically more complicated Fluorescent treponemal antibody absorption (FTA-ABS) or Treponema pallidum immobilization (TPI) procedure by many investigators from different parts of the world during these 10

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years. The TPHA has also been found to have definite advantage over the other tests because it is easy to perform and economic.

The present authors felt that the TPHA might be the most reasonable method to be used in this country and decided to evaluate it in the serodiagnosis of problem cases.

Sera from 516 presumed normal persons, 686 pregnant women and 1345 patients with various diseases other than syphilis were screened with the standard VDRL procedure as described and recommended by USPHS. Out of these, 475 of the presumed normal persons, 646 of the pregnant women and 1243 of the patient group with various diseases other than syphilis were serologically nonreactive and 10, 12 and 31 sera from each of the above groups, respectively, were found to be true syphilitic with definite evidence of clinical signs or history of syphilis. Thirty-one out of the presumed normal persons, 28 out of the pregnant women and 71 out of the patient group with various diseases other than syphilis showed either weakly reactive or reactive VDRL in undiluted sera without definite evidence of syphilis and these 130 sera from 130 persons were the subject of the present study.

The TPHA was carried out on these 130 sera according to the manual MHA-TP instructed by National Institute of Health, Japan. The reagents used in this study were manufactured and supplied by the Fujizoki Pharmaceutical Co. Ten (32.3%) out of the 31 sera from presumed normal persons, 11 (39.2%) out of the 28 sera from pregnant women and 28 (39.4%) out of the patient group with various diseases other than syphilis showed reactive TPHA. Eighty-seven of the total 130 sera showed weakly reactive VDRL, so called rough result and 19 (21.8%) of these 87 sera showed reactive TPHA, while 30 (69.8%) of the 43 sera which showed reactive VDRL were found to be TPHA reactive. These results are in general agreement with those of other investigators confirmed by the more complicated FTA-ABS or TPI. The overall incidence of syphilis was 3.87%, 3.35% and 4.38% in presumed normal persons, in pregnant women and in patient group with various diseases other than syphilis respectively.

Considering the relative lack of study concerning to the false positive reactions in this country, these results may be helpful to the clinician to make a certain diagnostic decision when they meet such a patient whose VDRL is weakly reactive or reactive in the absence of definite evidence of syphilis. The authors concluded that the MHA-TP technique is easy in performance, economic and highly specific in serodiagnosis and that this technique is highly recommended in this country.

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結論
現在、国内において最も一般的に使用されている梅毒血清検査(Venereal disease research laboratory)は、他の周知されているカルドリピン-レチシン抗原を使用した、非特異性梅毒血清検査(nontrepo-