PARALLEL SERUM TESTING WITH THE V.D.R.L. SLIDE TEST, THE MEINICKE SLIDE TEST, AND THE PRICE PRECIPITATION REACTION*

BY

BALBIR SINGH and M. D. SHARMA

From the Department of Pathology, Irwin Hospital, New Delhi

The W.H.O. Venereal Disease Demonstration Team, Simla, India, has been encouraging the use of the V.D.R.L. slide test with cardiolipin antigen (Harris and Rosenberg, 1946) and the Meinicke slide test (Kvittingen, 1948) in the serology of syphilis because of their simplicity and the low expense involved in their performance. As neither of these tests had previously been given a wide trial under tropical conditions, it was proposed to examine sera by these tests in parallel with the Price precipitation reaction (Price, 1948; 1949). This last test is a modification of the Kahn test and has been in use in this laboratory for some time. The results of these tests are summarized in the Table.

TABLE
RESULTS OF PARALLEL TESTING OF 4,602 SERA WITH THE V.D.R.L. AND MEINICKE SLIDE TESTS AND THE PRICE PRECIPITATION REACTION

Tests			No. of Sera	Per cent.	Results
V.D.R.L.	Meinicke	P.P.R.			
—	—	—	3229	70.2	91.9 per cent. agreement
+	+	+	999	21.7	
—	—	+	4	0.09	8.09 per cent. disagreement
+	—	+	28	0.6	
+	+	—	198	4.3	
+	—	—	46	1.0	
—	+	—	67	1.4	
—	+	+	31	0.7	

Comments

The sensitivities of the V.D.R.L. slide test, the Meinicke slide test, and the Price precipitation

reaction in terms of the number of positive reactions were 27.6 per cent., 28.1 per cent., and 23.1 per cent. respectively. Both the V.D.R.L. and the Meinicke tests were more sensitive than the Price test, but four (0.09 per cent.) out of 4,602 sera gave a positive reaction with Price's test alone, 67 (1.5 per cent.) were positive with the Meinicke slide test alone, and 46 (1.0 per cent.) were positive with the V.D.R.L. slide test alone. These findings suggest that the behaviour of the cardiolipin and Meinicke antigens is similar to other flocculation or complement-fixation tests for syphilis in that neither will react with all syphilitic sera.

No comments can be made on the specificity of these tests, which is of much more importance than their sensitivity in serological tests for syphilis. It has not yet been possible to collect sufficient data about the non-specific reactions given by these tests. With the object of excluding such reactions, doubtful or weak positive results were not taken into consideration except when they were observed in known cases of syphilis, or when they were found on repeated tests in sera from patients with a definite clinical history of syphilitic infection.

We take this opportunity of thanking Dr. J. Kvittingen, Serologist, W.H.O. Venereal Disease Demonstration Team, Simla, for supplying us with the antigens for the V.D.R.L. and Meinicke slide tests.

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