

NOTES

A More Complete Evaluation of the Color-Coded Antigen for the Automated Reagin Test

N. G. LAMBERT* AND A. R. STE-MARIE

Laboratory Services, Ministère des Affaires Sociales du Québec, Laval des Rapides, Québec, Canada H7V 1J1

Received for publication 2 December 1974

A comparative study, on 500 samples, of the toluidine red antigen, one of the low-cost, color-coded antigens for the Automated Reagin Test, shows a greater sensitivity than the rapid plasma reagin card antigen.

A more complete evaluation of toluidine red antigen, one of the low-cost, color-coded antigens for the Automated Reagin Test described earlier (1), was performed and compared to the charcoal rapid plasma reagin (RPR) card antigen (2). Results shown in Table 1 are from 500

expected to show the same sensitivity as the toluidine red antigen.

It is concluded that the color-coded antigens are more sensitive than the RPR card antigen and can be used successfully in the Automated Reagin Test. Preparation of color-coded anti-

TABLE 1. Comparative results

Known cases of syphilis (untreated and treated ^a)	No. of sera tested	Charcoal RPR card antigen reaction			Toluidine red antigen reaction		
		Positive	Negative	Doubtful	Positive	Negative	Doubtful
Primary	141	118	19	4	123	12	6
Secondary	286	254	26	6	261	19	6
Tertiary	15	14	1	0	15	0	0
Early latent	35	33	2	0	33	1	1
Late latent	22	21	1	0	21	1	0
Congenital	1	1	0	0	1	0	0
Percent		88.2	9.8	2	90.8	6.6	2.6

^a Treated within a short period.

sera from known cases of different stages of syphilis, untreated and treated within a short period. Considering doubtful reactions as positive reactions, 90.2% of sera were found positive with the charcoal RPR card antigen, whereas 93.4% were found positive with toluidine red antigen. Stability studies over a 6-month period showed no decrease in sensitivity of the antigen. Prepared by the same procedure, the graphite, phthalo green, and phthalo blue antigens (1) are

gens can be made at an approximately 80% lower cost than the commercial charcoal RPR card antigen.

LITERATURE CITED

1. Kasatiya, S. S., and N. G. Lambert. 1974. Color-coded antigen for the Automated Reagin Test for syphilis. *Appl. Microbiol.* **28**:317-318.
2. Portnoy, J., J. H. Brewer, and A. Harris. 1962. Rapid plasma reagin card test for syphilis and other treponematoses. *Public Health Rep.* **77**:645-652.