

The urine protein heat coagulation test - A useful screening test for proteinuria in pregnancy in developing countries: A method validation study

Dissanayake, V.H.W.^{a b c f}, Morgan, L.^b, Pipkin, F.B.^c, Vathanan, V.^d, Premaratne, S.^d, Jayasekara, R.W.^a, Seneviratne, H.R.^{d e}

^a Human Genetics Unit, Faculty of Medicine, University of Colombo, Sri Lanka

^b Division of Clinical Chemistry, Institute of Genetics, University of Nottingham, United Kingdom

^c Division of Obstetrics, School of Human Development, University of Nottingham, United Kingdom

^d University Obstetrics Unit, De Soysa Hospital for Women, Colombo, Sri Lanka

^e Dept. of Obstetrics and Gynaecology, Faculty of Medicine, University of Colombo, Sri Lanka

^f Human Genetics Unit, Faculty of Medicine, University of Colombo, Kynsey Road, Colombo 8, Sri Lanka

Abstract

In many parts of the developing world, the urine protein heat coagulation test is routinely used to screen for proteinuria in pregnancy. The aim of this study was to determine whether $\geq 1+$ on a standardised heat coagulation test reliably detects significant proteinuria and to compare it with the dipstick test for urinary protein. Heat coagulation test, dipstick test and 24-hour urine protein excretion results of 102 women were compared. $\geq 1+$ on heat coagulation test is as sensitive and specific as $\geq 2+$ on the dipstick test in detecting proteinuria of ≥ 500 mg/day. The heat coagulation test, however, is less sensitive than $\geq 1+$ on dipstick in detecting lesser degrees of proteinuria.