

Proteinuria during pre-eclampsia: A poor predictor of complications?

March 24 2009

The estimation of levels of proteinuria in women with pre-eclampsia is not a clinically useful test to predict fetal or maternal outcomes. Researchers publishing in the open access journal *BMC Medicine*, present evidence that could change current clinical practice.

Proteinuria, its presence and degree, is currently an essential criterion in diagnosing pre-eclampsia and is widely considered to predict adverse outcomes for mother and fetus. In a systematic, quantitative review of 16 primary research articles including 6749 women, the authors found that [proteinuria](#) was a poor predictor of maternal and fetal complications. Outcomes tested for included eclampsia, abruption, HELLP syndrome, stillbirth, neonatal death, perinatal death, small for gestational age and NICU admission.

Shakila Thangaratnam of Birmingham Women's Hospital and her colleagues used four databases (MEDLINE, EMBASE, MEDION and the Cochrane Library) to select the studies for [systematic review](#). By calculating likelihood ratios for positive and negative test results for each individual test threshold and each outcome of interest, they demonstrated the clinical relevance of assessing proteinuria levels in pre-eclampsia for each outcome. The LRs were not significant for any adverse maternal outcome. At cut-off level of proteinuria of 5g in 24hours, they found a slight association with [stillbirths](#) for positive test results. However, with no significant positive and negative LRs, proteinuria estimates were found to be poor predictors of neonatal and [perinatal deaths](#).

According to Thangaratinam, 'Our systematic review has shown proteinuria levels in [pre eclampsia](#) to be poor predictors of adverse maternal and fetal outcomes. We need large well-conducted studies to estimate the risk of complications especially in the subgroup of women who have pre eclampsia before 34 weeks when the management decision is often critical to mother and baby.'

More information: Estimation of proteinuria as a predictor of complications of pre-eclampsia: a systematic review

Shakila Thangaratinam, Arri Coomarasamy, Fidelma O'Mahony, Steve Sharp, Javier Zamora, Khalid S Khan and Khaled MK Ismail
BMC Medicine (in press) www.biomedcentral.com/bmcmed/

Source: BioMed Central ([news](#) : [web](#))

Citation: Proteinuria during pre-eclampsia: A poor predictor of complications? (2009, March 24) retrieved 25 April 2024 from

<https://medicalxpress.com/news/2009-03-proteinuria-pre-eclampsia-poor-predictor-complications.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--