An assessment of diagnostic value of protein / creatinine ratio in patients with suspected preeclampsia

Abstract

Background & Objective: Preeclampsia is a common complication of pregnancy, it's about 5-7 percent in pregnant and it may complicate mother or fetus which ends with death. The purpose of this study was to determine the value of the protein / creatinine ratio in prediction of 24-hour urine total among women with suspected preeclampsia.

Materials & Methods: 150 women who were evaluated for suspected preeclampsia at ≥20 weeks of gestation were studied prospectively in Az-zahra and Emam hospital Sari. There was no concurrent or preexisting systemic disease. They were undergoing a 24-hour urine collection for the determination of proteinuria. A single voided urine specimen was obtained after completion of the 24-hour urine collection and analyzed for the P/C ratio.

Results: The random urinary protein to creatinine ratios is strongly associated with the 24-hour total protein excretion (P<0.05, r = 0.37). The best cut off of 0.175 yields a sensitivity of 85.9% and a specificity of 66%.

Conclusion: The random urinary protein to creatinine ratio could replace the 24-hour urine collection as a simple, faster more useful method for the diagnosis of significant proteinuria.

Key Words: 24-hours proteinuria - Protein to creatinine ratio - Preeclampsia

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