
microalbuminuria as a predictor of pregnancy induced hypertension

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A review of the world literature highlights the confusion and controversy concerning the terminology, prediction, diagnosis, prevention and management of preeclampsia. The involvement of the kidneys in preeclampsia is one of its more consistent features. Proteinuria reflects advanced disease associated with poorer prognosis than if it is absent. The content of the urinary sediment indicating both glomerular and tubular damage. Microalbuminuria is a well documented component of preeclampsia, it is usually an early feature preceding the onset of proteinuria. Microalbuminuria is also a characteristic of preeclampsia but not of other forms of hypertension in pregnancy. In this study the urinary microalbumin, the urinary calcium/urinary creatinine ratio were obtained in 4 weeks interval among 300 nulliparous gravid women at 24-34 weeks of gestation onward. The results were 10 patients developed PIH without microalbuminuria positive (group B) and 40 patients developed PIH with microalbuminuria positive group (A) and 250 patients still normotensive and microalbuminuria negative (group C) during the period of follow up (group A) from the start show higher level of microalbuminuria (10 p.g/ml) in contrast to groups (B & C) (40 p.g/ml). The level was progressively increase in group (A), the mean at 28 weeks 20 p.g/ml to 50 p.g/ml at 34 weeks in comparison with groups (B & C) still not increasing the urinary calcium/urinary creatinine ratio show low level from the start in group (A) and (B) 0.17 $\mu\text{mol/L}$ and progressively decreasing until reach 0.07 $\mu\text{mol/L}$ in comparison with group (C) which start elevated 0.32 $\mu\text{mol/L}$ and with non-significant decreasing with progression of gestational age. Also from the study was noted the progressive positive correlation between the microalbuminuria and the blood pressure through the period of follow up and presence of the negative correlation between the Ca/Cr ratio with the blood pressure. Also we noted the low birth weight with group (A) 2308 gm which is more than group (B) 2805 gm and group (C) 3201 gm. The urinary calcium/urinary creatinine ratio show low level from the start in groups (A & B) PIH group as the mean was 0.17 $\mu\text{mol/L}$ and progressively decreasing until reach 0.07 $\mu\text{mol/L}$ in comparison with group (C) normotensive group which start elevated 0.32 $\mu\text{mol/L}$ and with non-significant decreasing with progression of gestational age. Also from the study was noted the progressive positive correlation between the microalbuminuria and the blood pressure through the period of follow up and the presence of negative correlation between Ca/Cr ratio and blood pressure, also we noted the low birth weight with group (A) 2308 gm which is less than group (B) 2805

gm and group (C) 3201 gm. Also we noted the increase in the mean maternal bodyweight through the period of follow up in group (A) than the other two groups (B & C). Also the accuracy of microalbuminuria as a predictive test was 60% and when combined with Caler ratio was 80%.