SERUM AND URINARY CALCIUM IN VARIOUS FORMS OF GESTATIONAL HYPERTENSION

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Gestational hypertension is an important cause ofperinatal morbidlty and mortality. In the diagnosis ofpreeclampsia one or more of the classic signs of thedisease are often absent resulting in misdiagnosis andperhaps mismanagement.Considerable interest has developed regardlng therole of Ca in the regulation of blood pressure includingthe pregnant state. On the basis of current informationit is clear that Ca supplementation duringpregnancy lowers blood pressure.The aim of the present work is to see if serum Calevel. urinary Ca level. and urinary Ca/creatinlneratio could be used as new criteria in dlstinguishingvarious forms of gestational hypertension.Forty pregnant women in the 3rd trimester with ageranging from 20-36 y were included in the study. Theywere classified into 4 groups: 13 normal pregnant womenas a control group. 10 preeclamptic women. 9 pregnantwomen with chronic hypertension and 8 pregnant womenwith transient hypertension.In our study, we found no significant differencein total serum Ca among the studied groups. However.there was significant reduction in Ca/creatinine ratioin random urine samples and urinary Ca excretion/24h inthe preeclamptic group compared to other hypertensivegroups and normal pregnant group.from this results. we conclude that measurement ofurinary Ca/24h. or more simply Ca/creatinine ratio inrandom urine samples could be used as an index todistinguish preeclampsia from other benign forms ofgestational hypertension and from normal pregnancyduring the 3rd trimester.