

**ELECTRONIC GUIDE TO THESES APPROVED BY  
PHYSICAL THERAPY DEPARTMENT FOR OBSTETRICS AND  
GYNAECOLOGY AND ITS SURGERY  
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## Physical Therapy Department for Obstetrics and Gynaecology and Its Surgery

Master Degree  
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Title	:	An exercise test for predicting pregnancy - induced hypertension in late pregnancy.
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Abstract	:	
<p>this study was done to predict pregnancy - induced hypertension and preeclampsia which may develop later in pregnancy by using exercise testing umbilical artery systolic / diastolic ratio (S/D ratio) and subsequent maternal mean arterial blood pressure (MAP) at 24 weeks' gestation . Thirty volunteers pregnant women at 24 weeks' gestation (15 primiparous and 15 multiparous with parity from 2-3 times) from outpatient clinic of obstetric department in Bab-Elsheria hospital performed the exercise test . Evaluation of all subjects was done at 24 weeks' gestation (before and after exercise test) , repeated at 28 and 32 weeks' gestation without exercise through measuring maternal systolic and diastolic blood pressures , maximum systolic and end diastolic velocities of the fetal umbilical artery then calculating maternal mean arterial blood pressure (MAP) , systolic / diastolic ratio (S/D ratio) , pulsatility index (PI) and resistance index (RI) . The results of the study reveals that exercise testing umbilical artery S/D ratio has positive predictive value of 100% , negative predictive value of 95.24% , sensitivity 90% and specificity 100% . Subjects who developed pregnancy - induced hypertension were 7 subjects (23.3% from total sample) , 5 subjects were primiparous (33.3%) and 2 subjects were multiparous (13.3%) while , preeclampsia developed in 3 subjects (10% from total sample) , 2 subjects were primiparous (13.3%) and 1 subject was multipara (6.7%) . It can be concluded that exercise testing (5 minutes warm up , 15 minutes active exercise and 5 minutes cool down) performed at 24 weeks' gestation can predict pregnancy - induced hypertension or preeclampsia developed later in pregnancy and it is more preferable than other tests because it is non - invasive, easy to perform and has no harmful effects either on the mother or the fetus . Pregnancy - induced hypertension and preeclampsia incidence is more in primiparous than multiparous women also in older pregnant women.</p>		
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	2.	predicting pregnancy.
	3.	Hypertension.
	4.	late pregnancy.
	5.	pregnancy.
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