

**ELECTRONIC GUIDE TO THESES APPROVED BY  
PHYSICAL THERAPY DEPARTMENT FOR OBSTETRICS AND  
GYNAECOLOGY AND ITS SURGERY  
PREPARED BY NERVEEN ABD EL SALAM ABD EL KADER AHMED**

## Physical Therapy Department for Obstetrics and Gynaecology and Its Surgery

Master Degree  
2003

<b>Author</b>	:	<b>Enas Abd El-Shafy Abd El-Azim El-Nimr.</b>
<b>Title</b>	:	<b>Effect aerobic exercise training on placental blood flow in pre-eclamptic and diabetic patients.</b>
<b>Dept.</b>	:	<b>Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.</b>
<b>Supervisors</b>	1.	<b>Salwa Mostafa El-Badry.</b>
	2.	<b>Mohamed Mostafa Radwan.</b>
	3.	<b>Amel Mohamed Yossef.</b>
<b>Degree</b>	:	<b>Master.</b>
<b>Year</b>	:	<b>2003.</b>
<b>Abstract</b>	:	
<p>This study was done to examine the effect of aerobic exercise training on the placental blood flow of pre-eclamptic and diabetic patients . thirty volunteers ' pregnant women at 24 weeks ' gestation , 15 had pre-eclampsia (PE)(Group A)and 15 had diabetes (Group B)were selected from the in-patients department of obstetrics at Bab El-Sheria , El-Azhar University hospital . both groups (A, B)were enrolled in the same exercise - training program (started by 5 min . warm up , 20 min . of active exercise at 60% of the maximum heart rate and ended by 5 min . cool down), for one month (3sessions per week). evaluations of all patients were done before and after the end of the exercise training program through measuring maximum systolic , end diastolic velocities of the umbilical artery , systolic / diastolic (S/D)ratio , resistance index (RI)and plasticity index (PI). the results of this study revealed that moderate aerobic exercise training program had a positive effect of increasing the placental blood flow in pre-eclamptic and diabetic pregnant women as it was significantly decreased (<math>P&lt;0.05</math>)the maximum systolic velocity , S/D ratio , RI and PI , while end diastolic velocity increased significantly (<math>P&lt;0.05</math>). accordingly , it could be concluded that moderate aerobics exercise training program is easy to be performed safe and has no harmful effect either on the mother or her fetus , as well as it has a positive effect of improving placental blood flow in pre-eclamptic and diabetic pregnant women.</p>		
<b>Key words</b>	1.	<b>Aerobic exercise.</b>
	2.	<b>placental blood flow.</b>
	3.	<b>pre-eclampsia.</b>
	4.	<b>diabetes mellitus.</b>
	5.	<b>pregnancy.</b>
<b>Arabic Title Page</b>	:	<b>تأثير التمرينات الهوائية علي سريان الدم المشيمي في مريضات تسمم الحمل البسيط والداء السكري.</b>
<b>Library register number</b>	:	<b>1000-1001.</b>