

Effect of Aerobic Exercise on Fetal Outcomes in Diabetic Pregnant Women

Fatima M. Elbelidy, Adly A. Sabbour, Abeer M. ElDeeb, Amir A.Gabr

Department of Physical Therapy for Women's Health, Faculty of Physical Therapy, Cairo University, Giza, Egypt
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Abstract

Background: This study aimed to evaluate the effect of aerobic exercise on fetal outcomes including body weight, fetal length, head circumference, infants' chest circumference, abdominal circumference and Apgar score 1 and 2 in gestational diabetic women.

Materials and methods: Thirty gestational diabetic women were randomly distributed into two groups equal in number. The control group received insulin therapy and diet recommendations, while the exercise group received the same treatment and aerobic exercise in form of treadmill training for 30 minutes/day for 3times/week.

Results: Comparing both groups post-intervention, results revealed that there were statistically non-significant differences in the gestational age ($p=0.48$), infants' length ($p= 0.86$), head circumference ($p= 0.15$), infants' chest circumference ($p= 0.09$), and Apgar score 1 ($p= 0.051$). However, there was a statistical significant decrease in infants' weight ($p=0.003$), and abdominal circumference ($p= 0.001$), as well as a statistical significant increase in Apgar score 2 ($p= 0.02$).

Conclusion: The aerobic exercise showed improvements in the fetal outcomes without producing any harmful effects to infants of diabetic women.

Keywords: Aerobic exercise, fetal outcomes, diabetic pregnant women.