Biological Risk Indicators for Non-specific Low Back Pain in Young Adults of Amritsar, Punjab, India

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ABSTRACT The purpose of the present study was to evaluate and correlate the various biological risk indicators of non-specific low back pain (NSLBP) in young adults. The study was based on a total of 100 purposively selected young adults (50 males and 50 females) aged 18 – 25 years with non-specific low back pain and 100 matched controls (50 males and 50 females) asymptomatic with no history of low back pain taken from Amritsar, Punjab, India. To solve the purpose, some anthropometric measurements, *viz.* height, weight, BMI, four skinfold measurements, (i.e. biceps, triceps, subscapular and suprailiac), back strength, flexibility measure and abdominal muscle endurance were taken on each subject. Results indicated statistically significant differences ($p<0.05$) in abdominal muscle endurance ($t=2.58$) between NSLBP boys and controls and in weight ($t=3.22$), biceps skinfold ($t=3.04$), height ($t=2.67$), triceps skinfold ($t=2.83$), subscapular skinfold ($t=2.32$) and in percent lean body mass ($t=2.80$) between NSLBP girls and controls. Both in boys and girls with non-specific low back pain, back strength has positively significant correlations ($p<0.05$) with height ($r=0.487$ and 0.360 respectively), weight ($r=0.495$ and 0.213 respectively), BMI ($r=0.299$ and 0.461 respectively) and flexibility measure ($r=0.386$ and 0.388 respectively) and negatively significant correlation ($r=-0.417$ only in NSLBP girls) with percent body fat.