The relationship between level of physical activity, body composition & lipid profile with lumbar disc degeneration (LDD) in surgery candidate adults

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ntroduction: Back Pain (BP) is a serious and costly disabling problem in most communities. Lumbar Disc Degeneration (LDD) is consider as one of the most important causes of low back pain (LBP) and various genetic and environmental factors are involved in it. The purpose of this study was to investigate the frequency of some known risk factors of intervertebral disc degeneration in patients undergoing surgery and their relation with the type of disease in them. Method: The study was conducted on 130 adult patients (20 to 77 years) undergoing surgery for one of the lumbar disc degeneration diseases in the Poursina medical education center in Rasht. The data collection method of this study was clinical and based on medical records of the hospitalized patients, face-to-face questioning using a pre-tested questionnaire and the RAPA standard questionnaire, fasting blood test request and using it's results and anthropometric information were measured by the researcher. The data was analyzed by SPSS version 16 and the Chi-square test and Fisher's exact test were used to examine the relationship between qualitative and ranking variables with a significance level of P‹0.05. Results: The mean age of patients was 48.17 ± 12.28 years, with no significant differences between males and females (the age average in male 2/1 years less than females) and the number of men was 1.8 times than women. 73% of patients developed symptoms more than a year and 61% were hospitalized with Hernia diagnosis. 60.8% of the subjects had associated illnesses wich hyperlipidemia (32.7% of cases) and hypertension (30.8% of cases), were the most common illnesses. There was no history of other lumbar diseases in 87.7% of the subjects and 83.8% did not report any history of waist trauma in the past. More than

half of the subjects (58.4%) reported some recognized lumbar problems in at least one of their first-grade relatives and 34.6% reported a lumbar problem leading to surgery in them; the highest number of surgeries in one family was 5cases. In the study of fasting lipid profile in patients, 87.7% had an abnormal lipid profile. Total cholesterol, LDL and triglyceride levels were 46.2%, 68.5% and 46.2%, respectively, upper than normal and the HDL level was lower than normal in 44.6% of subjects. The BMI of 74.6% of subjects was greater than 25 and 84.6% had abdominal circumference more than normal. The mean BMI and abdominal circumference in the subjects was 28.14 ± 4.58 and 7.43 ± 16.57 cm respectively. A greater percentage of women were with abnormal abdominal circumference than men (89.3% vs. 76.1%) and there was a significant difference between mean of abdominal circumference in them (P =0.11). Sudden weight changes, was reported in 26.2%, of which 56% was sudden weight loss. The physical activity¬ level in 88.5% of people was below optimum and 89.2% had no professional excersise experience. The majority of patients (77.8%) were educated under diploma, and about one-third of the jobs were labor and agriculture and more than a third was housekeeping. 79.2% of subjects did not report a history of smoking. Inferential findings in the present study indicated a significant relationship between BMI and abnormal lipid profile with Lumbar Disc Degeneration (PIntroduction: Back Pain (BP) is a serious and costly disabling problem in most communities. Lumbar Disc Degeneration (LDD) is consider as one of the most important causes of low back pain (LBP) and various genetic and environmental factors are involved in it. The purpose of this study was to investigate the frequency of some known risk factors of intervertebral disc degeneration in patients undergoing surgery and their relation with the type of disease in them. Method: The study was conducted on 130 adult patients (20 to 77 years) undergoing surgery for one of the lumbar disc degeneration diseases in the Poursina medical education center in Rasht. The data collection method of this study was clinical and based on medical records of the hospitalized patients, face-to-face questioning using a pre-tested questionnaire and the RAPA standard questionnaire, fasting blood test request and using it's results and anthropometric information were measured by the researcher. The data was analyzed by SPSS version 16 and the Chi-square test and Fisher's exact test were used to examine the relationship between qualitative and ranking variables with a significance level of P˂0.05. Results: The mean age of patients was 48.17 ± 12.28 years, with no significant differences between males and females (the age average in male 2/1 years less than females) and the number of men was 1.8 times than women. 73% of patients developed symptoms more than a year and 61% were hospitalized with Hernia diagnosis. 60.8% of the subjects had associated illnesses wich hyperlipidemia (32.7% of cases) and hypertension (30.8% of cases), were the most

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