

Abstract 30

Risk factors associated with abdominal hernia among patients admitted to surgical wards of Teaching Hospital, Jaffna

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Background and objective: Abdominal wall hernias affect all ages and sexes. Major risk factors include weightlifting, constipation, weight gain, smoking, and past surgeries. Identifying these risks helps prevent hernias and enhances the health and efficiency of the working population. This study aimed to assess association between known risk factors of abdominal hernia and the occurrence of abdominal hernia among patients admitted to the surgical wards of Teaching Hospital Jaffna (THJ).

Methods: A descriptive cross-sectional study was conducted among 143 patients admitted to the surgical wards of THJ. Patients with abdominal hernia were identified through the admission book and bed head tickets (BHT). An interviewer-administered questionnaire including socio-demographic, physical activity, alcohol, smoking habit, past medical history was used to collect data, which was analysed using SPSS software. Descriptive statistics and chi square tests were applied for data analysis. P value <0.05 was considered statistically significant. Ethical clearance was obtained from the University of Jaffna.

Results: Majority (79.7%) were males. Mean age and Body Mass Index was 56.7 (± 15.8) years and 24.8 (± 3.3) kgm⁻² respectively. Most common type of hernia was direct inguinal hernia (75%), followed by periumbilical hernia (10.4%), para umbilical hernia (4.1%), and incisional hernia (4.1%). Highest incidence was observed in the 50 to 70-year age group. Vigorous intensity activities were reported by 65 patients (45.5%, p=0.156). Majority of patients were not regular alcohol consumers (86.3%, p=0.281), and non-smokers (53.8%). Respiratory and gastrointestinal illness was reported by 39.9% (p=0.958) and 28.7% (p=0.442) of the patients respectively, while constipation was reported by 29.4% (p=0.074). Farmers and fishermen were mostly affected, followed by labourers and housewives, and office workers and professionals. Forty-five patients (31.5%) reported previous abdominal surgeries. Statistical analysis revealed a highly significant association between prior abdominal surgery and hernia development (p<0.001).

Conclusion: Most abdominal hernia cases occurred in males above 50 years of age engaging in prolonged vigorous activity. The findings suggest that reducing working hours after the age of 50 and minimizing alcohol consumption could help prevent the occurrence of hernias. Prior abdominal surgery and constipation were significant risk factors.

Keywords: abdominal hernia, physical activity, alcohol consumption, Teaching Hospital, Jaffna