

Original article:

Assessment of Risk Factor Associated with Hemorrhoids: A Prospective Study

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ABSTRACT

Background: Hemorrhoids are one of the most common anal disorders. It is mostly seen in patients above 60 years of age. The present study was conducted to assess the risk factors associated with hemorrhoids in study sample.

Materials & Methods: The present study was conducted in the department of General Medicine, Government Hospital, Dungarpur, Rajasthan, India. The present study was conducted on 50 patients of both genders. Factors such as smoking, Obesity, physical exercise were recorded.

Results: Males and females had equal number of patients. The difference was non-significant. Age group 20-40 years had 6 males and 7 females, 40-60 years had 7 males and 5 females and age group >60 years and maximum number of 12 males and 13 females. The difference was significant. 30 were on mixed diet, 12 were vegetarian and 8 were non-vegetarian. The difference was significant.

Conclusion: Hemorrhoids are commonly occurring disorders in people above 60 years of age, Risk factors include lack of physical activity, obesity, smoking and diet etc.

Key words: Hemorrhoids, Obesity, Smoking.

Introduction

Hemorrhoids or piles are masses or clumps of tissues which consist of muscle and elastic fibers with enlarged, bulging blood vessels and surrounding supporting tissues present in the anal canal of an individual. Hemorrhoids are one of the most common anal disorders. It is a condition characterized by the prolapsed of an anal cushion that may result in bleeding and pain. These cushions are usually found in three main locations: left lateral, right anterior, and right posterior. This condition is a common ailment among the adults. Individual >60 usually complain of this condition once in their life. Reports of involvement of children have been found in the

literature. It is considered to be 4th GIT most prevalent disorder.¹

Haemorrhoids are thought to be arising from increased intraabdominal pressure. These include prolonged straining, inadequate fibre intake, prolonged lavatory sitting, constipation, diarrhoea, ascites and pelvic space-occupying lesions. Constipation and prolonged straining also increase the shearing force on the anal cushions, further predisposing to the formation of haemorrhoids. In addition, pregnancy predisposes women to haemorrhoids, however these usually resolve after delivery.²

Although hemorrhoids are not fatal diseases, physical and psychological discomfort related with various symptoms of hemorrhoids such as anal bleeding,

pain, and itching sensation can significantly influence quality of life (QOL) in a person with hemorrhoids. External hemorrhoids are more often associated with anal discomfort because of engorgement. If thrombosis of external hemorrhoids occurs, this causes acute pain. On the other hand, internal hemorrhoids become symptomatic when they prolapse, thrombose, bleed or become ulcerated.³The present study was conducted to assess the risk factors associated with hemorrhoids in study sample.

Materials & Methods

The present study was conducted in the department of General Medicine, Government Hospital, Dungarpur, Rajasthan, India. It included 50 patients of both genders with complaint of hemorrhoids. All were informed regarding the study and written consent was obtained. Ethical clearance was taken from institutional ethical committee.

General information such as name, age, gender, symptoms etc. was recorded. Factors such as

smoking, alcoholism, Obesity, physical exercise were recorded. Results were subjected to statistical analysis using chi-square test. P value less than 0.05 was considered significant.

Results

Table I shows that males and females had equal (25) number of patients. The difference was non-significant (P= 1).

Graph I shows that age group 20-40 years had 6 males and 7 females, 40-60 years had 7 males and 5 females and age group >60 years and maximum number of 12 males and 13 females. The difference was significant (P< 0.05).

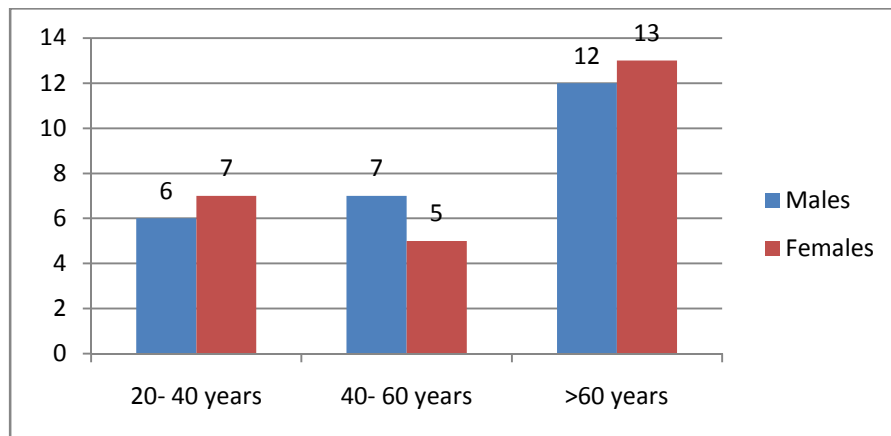
Graph II shows that 30 were on mixed diet, 12 were vegetarian and 8 were non-vegetarian. The difference was significant (P< 0.05).

Graph III shows that 26 patients were smokers and 24 were non smoker. 24 had BMI < 25 Kg/m² and 28 had >25 Kg/m². 20 had habit of regular exercise and 30 had not. The difference was significant (P< 0.05).

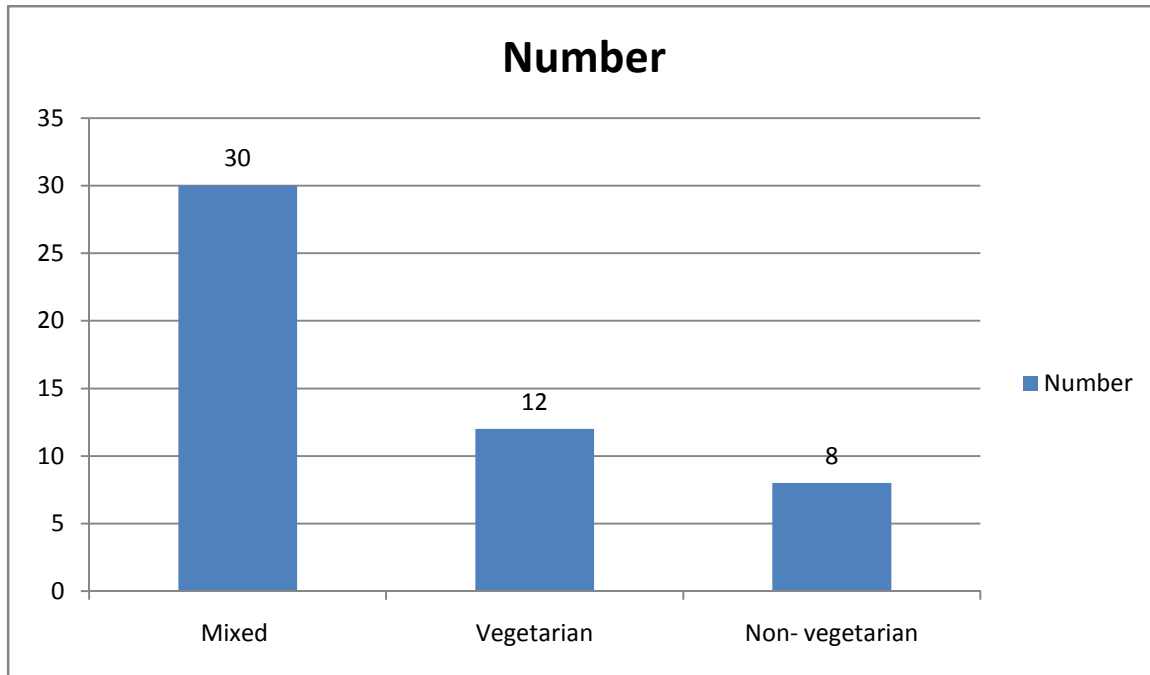
Table I Distribution of patients

Total- 50		
Males	Females	P value
25	25	1

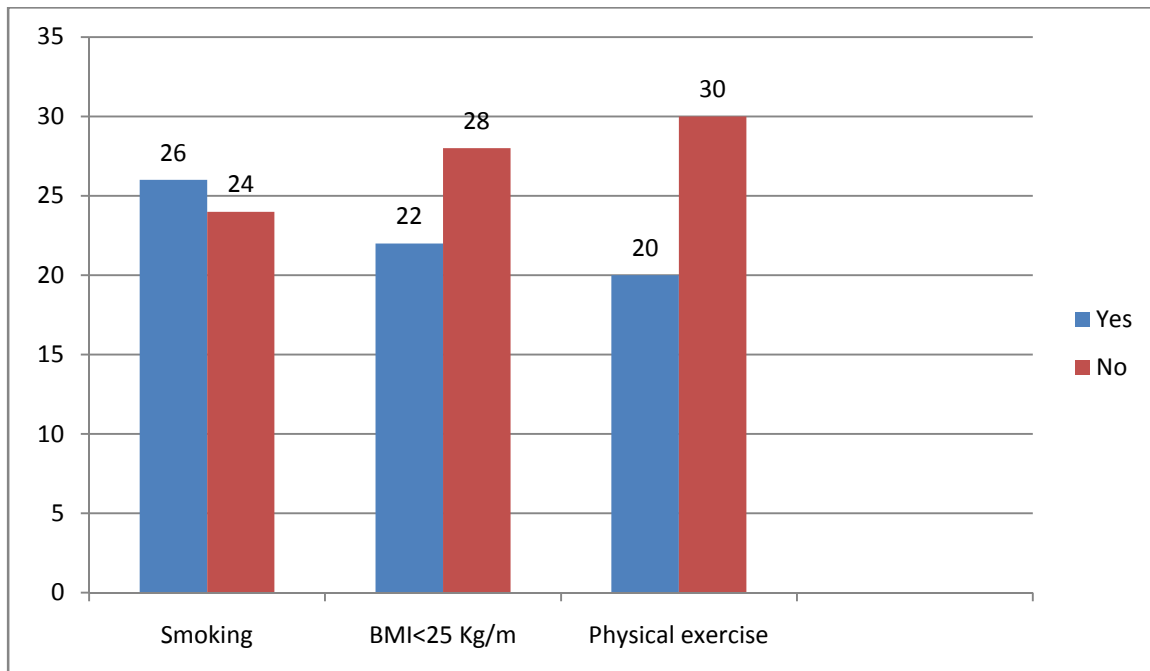
Graph I Age & Gender wise distribution of patients



Graph II Life style of patients



Graph III Obesity, Physical exercise and Obesity in patients



Discussion

The actual cause of hemorrhoids remains unknown. But it is proposed to be caused by temperament, body habits, customs, passions, sedentary life, tight-laced clothes, climate. Obesity, older age, sex, a family history of hemorrhoids, higher socioeconomic status, physical activity, alcohol consumption, diarrhea, constipation, straining during defecation, low intake of dietary fiber are among several factors that have been suggested to contribute to hemorrhoid development.⁴ The present study was conducted to assess the risk factors associated with hemorrhoids in study sample.

In our study, out of 50 patients, males were 25 and females were also 25. We observed that maximum number of patients (12 males and 13 females) were seen in patients >60 years of age. This is in agreement with Johnsaonet al.⁵ We found that 30 patients were on mixed diet, 12 were vegetarian and 8 were non- vegetarian. An increase in dietary fibre and oral fluids may help eliminate straining during defecation thereby reducing the damage caused by the shearing action of passing hard stool on the anal mucosa.

Obesity is a risk factor for hemorrhoids and our study also found a significant association between hemorrhoids and obesity. Increased intra-abdominal pressure in an obese person with high body fat and visceral fat is thought to provoke venous congestion of distal rectum and, thus, contribute to the development of hemorrhoids. The other probable

mechanism could be chronic inflammation in obesity. Obesity induces increased release of inflammatory cytokines and acute phase proteins, which steadily activates the innate immune system and affects metabolic homeostasis.⁶

We found that 26 patients were smokers, 24 had BMI < 25 Kg/m² and 30 had not habit of regular exercise. Jong Hyun⁷ in their study found that overall prevalence of hemorrhoids among study subjects was 14.4%, being more prevalent among women (15.7%) than among men (13.0%). Obesity and abdominal obesity were associated with a higher risk of hemorrhoids with odds ratios. Both self-reported depression and physician diagnosed depression were associated with significantly higher risk of hemorrhoids. No regular walking and experience of pregnancy for women were also associated with higher risk of hemorrhoids. However, educational level, alcohol consumption, physical activities, diabetes mellitus, hypertension, fiber, fat intake, and energy intake were not associated with a risk of hemorrhoids.⁸ Kaidar et al⁹ confirmed the beneficial effect of fibre in the treatment of symptomatic haemorrhoids for relieving overall symptoms such as bleeding, pain, prolapsing and itching.

Conclusion

Hemorrhoids are commonly occurring disorders in people above 60 years of age, Risk factors includes lack of physical activity, obesity, smoking and diet etc.

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