

**Prevalence of Modifiable lifestyle habits with haemorrhoids- A cross sectional study****Rohit Phandis<sup>1</sup>, Md Faiz Hussain<sup>2\*</sup>, Ghnana Prakash<sup>3</sup>, Amulya Kutikuppala<sup>4</sup>**<sup>1</sup>Assistant Professor, Department of General Surgery, AIMS, Hyderabad, India<sup>2</sup>Associate Professor, Department of General Surgery, AIMS, Hyderabad, India<sup>3</sup>Intern, AIMS, Hyderabad, India<sup>4</sup>Intern, AIMS, Hyderabad, India

Received: 08-09-2020 / Revised: 28-11-2020 / Accepted: 20-12-2020

**Abstract**

**Background:** Haemorrhoids are enlargement and distal displacement of normal anal cushion caused due to constipation & prolonged straining. The prevalence of patient presenting with disease remains lower than the actual burden of disease in the population. The study was undertaken to assess modifiable life style habits associated with the disease. **Method:** Questionnaire based study in which the PSS score and various life style habits of patients with haemorrhoids were assessed. **Result:** Out of 65 patients with haemorrhoids 24 (36.9%) patients had a PSS score of 1, 37(56.9%) patients had PSS score of 2 and 4(6.2%) patients had a PSS score of 3. 93.8% of patients consume non vegetarian diet, 66.2% patients spend >=10 mins in toilet, 81.5% patients have bowel movements <=2 per day, 18.5% patients use Indian toilet, 81.5% patients use western toilet. **Conclusion:** Haemorrhoids are one the common diseases observed due to faulty life style & defecatory habits, when not associated with other co morbidities can be modified to prevent the disease.

**Keywords:** Haemorrhoids, lifestyle habits, PSS score.

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**Introduction**

Proctology is a subspecialty involving diseases pertaining to perineal, anal and rectal region. 75% of the Indian population suffer from Proctological diseases; most of them can be avoided by modifying the lifestyle habits [2]. Though the prevalence of patients presenting with complaints of anorectal problems is low the actual burden of the disease in the general population is much higher than that seen in clinical practice. Symptoms such as bleeding per rectum, pain, pruritis, swelling, oozing and anal discharge indicate anorectal pathology. Among the many anorectal diseases the common disorders which can be treated/ preventable are haemorrhoids, anal fissure, anal fistulas of which haemorrhoids account to 48.4%.

Haemorrhoids are defined as abnormal and symptomatic displacement anal cushions. They are of two types, Internal and External haemorrhoids. Internal haemorrhoids are painless and asymptomatic and can occur at 3, 7, 11 o'clock position. External haemorrhoids are painful and are related to the inferior haemorrhoidal plexus deep in skin surrounding the anal verge.[5] The pathophysiology of haemorrhoids was not understood, for a long time the theory of varicose veins at the anal region was accepted, Today, the theory of sliding anal canal lining is widely accepted. Hence, haemorrhoids are considered as pathological term to describe downward symptomatic descent the of the anal cushions causing venous dilatation. [6]Aetiologies of haemorrhoidal development are multifactorial, including chronic constipation and prolonged straining. Thus there is evidence to believe that lifestyle habits play a major role in the causation haemorrhoids. Lifestyle being a major modifiable risk factor plays a significant role in preventing haemorrhoids. Life style habits like diet, frequency of bowel movements, toilet habits, cleaning habits, time spent in toilet are few

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etiological points we would like to study in the present study.

*Economic burden of haemorrhoids in India*-The treatment of haemorrhoids costs about 5% to 20% of the average annual income of a family, enough to push low income families below the poverty line. Medical and surgical options [4] are available and the choice of treatment depends on the stage and severity of the disease.

*Aims and Objectives:*

- To find prevalence of common lifestyle habits with haemorrhoids.
- To create awareness on necessity to adopt healthy lifestyle habits and breaks the chain of causation of haemorrhoids.

#### **Patients & Method**

The study thus conducted was a questionnaire based study. In this questionnaire the PSS score [1,3] is calculated and the patient is asked about the common life style habits which are believed to a role in causation of haemorrhoids.

**Study Design:** Cross- sectional study.

**Site:**General surgery department, Apollo Institute of Medical Sciences, Hyderabad.

#### **Study population**

Patients attending the general surgery outpatient with symptoms pertaining to haemorrhoids.

**Duration of Study:**6 months (October 2019 to March 2020)

**Sample Size:**65

**Inclusion criteria:** Old and New cases of haemorrhoids attending the General Surgery outpatient.

#### **Exclusion criteria**

- Individuals who have been operated for haemorrhoids and are presently symptom free.
- Individuals with positive family history of colorectal malignancies.
- Individuals with portal hypertension.

#### **Procedure**

The patient attending the OPD with symptoms of haemorrhoids are evaluated and following the diagnosis of haemorrhoids the patient is given a two part questionnaire following oral consent the first part containing questions which determine the PSS score and the second part of the questionnaire containing questions pertaining to common lifestyle habits which are believed to have an association with the causation of haemorrhoids. The parameters will then be tabulated and prevalence of different lifestyle habits with haemorrhoids were determined.

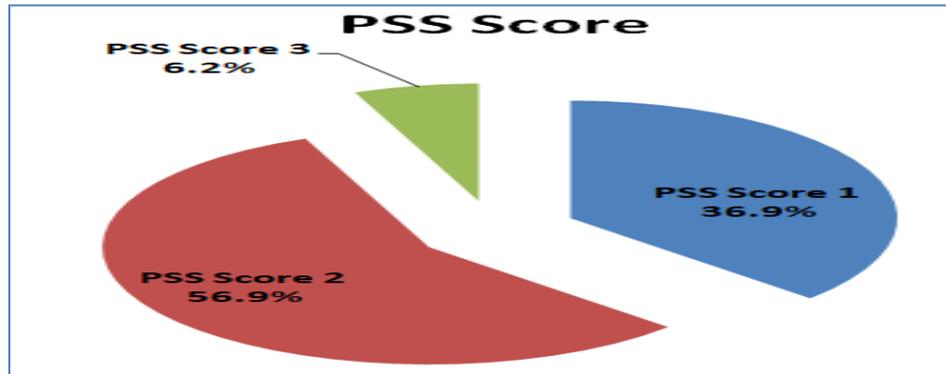
#### **Result**

The questionnaire was given to 65 patients with diagnosis of haemorrhoids and the data was tabulated. The data was analysed and the results are tabulated as in Table 1.

**Table 1:Data Analysis**

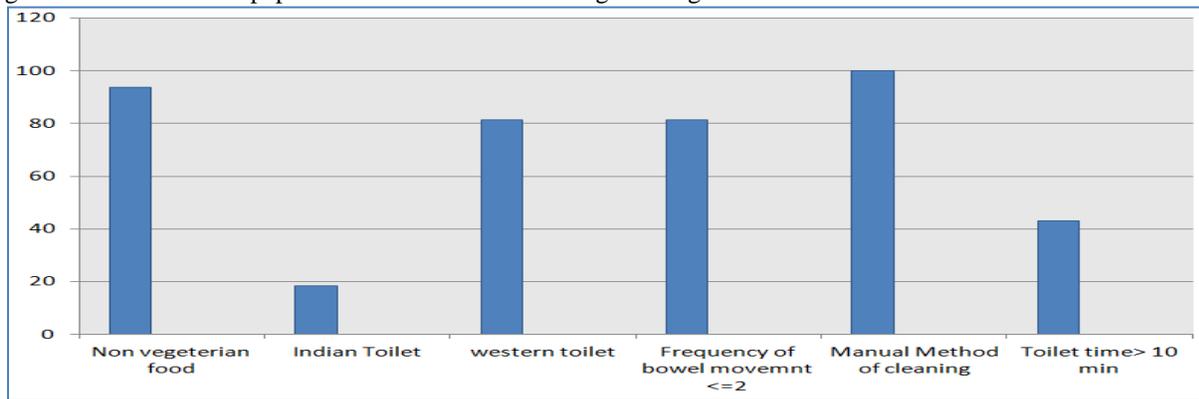
<b>Patient Characteristics</b>	<b>N</b>	<b>percentage</b>
No. patients with haemorrhoids	65	
PSS score 1	24	36.9
PSS score 2	37	56.9
PSS score 3	4	6.2
NON VEGETARIAN DIET	61	93.8
>10mins in toilet	43	66.2
Frequency of bowel movements<2	53	81.5
Manual type of cleaning	65	100
Indian toilet	12	18.5
Western toilet	53	81.5

Out of 65 patients with haemorrhoids 24 (36.9%) patients had a PSS score of 1, 37(56.9%) patients had PSS score of 2 and 4(6.2%) patients had a PSS score of 3. The percentages can be seen below in Figure 1.



**Fig 1:PSS Score**

Out of 65 patients the number of patients consuming non vegetarian diet is 61(93.8%), spending >10mins in toilet is 43(66.2%), frequency of bowel movements <=2 is 53(81.5%), using Indian toilet only is 12(18.5%), western toilet is 53(81.5%), using manual method of cleaning is 65 (100%). In the group of people in which the questionnaire was given none used tissue paper or bidet method of cleaning as in figure 2.



**Fig 2:Responses**

**Discussion**

This cross-sectional study was conducted in south Indian population to evaluate the prevalence of common life style habits in haemorrhoid patients and, increase awareness on necessity to adopt healthy lifestyle habits and break the chain of causation of haemorrhoids. . Majority of haemorrhoid patients had a PSS score of 2, followed by score 1 which indicates mild correlation of haemorrhoids with lifestyle stress. Other studies by San Yue et al & Taibian et al have also revealed the association of bowel symptoms with high PSS scores[10,11]. Lifestyle habit like non vegetarian diet was seen in significant proportion of haemorrhoid patients in the present study , studies by Ravindranath GG et al & khan et al showed higher incidence in people consuming non vegetarian diet . Inadequate fiber in take is one of the risk factor

for haemorrhoids, increasing the dietary intake of fiber reduces constipation [12,13].The present study showed majority of patient using western toilet , the use of Indian toilet with squatting straightens the Anorectal angle between rectum & anal canal facilitating early movement of faeces , studies by B.A Sikirov & Dov Sikirov supported this observation in their studies [14,15]. In our study 81.5% patients has less than 1 bowel movement per day ,contrary to study by Anne F perry et al who in their study noted increase in bowel movement to be associated with haemorrhoids. In the present study 66.2% of patient spent more than 10 minutes in toilet which indicates possible straining for defecation, no such association has been noted in other studies. In the current study no conclusion could be drawn for method of toilet cleaning as all patient used

manual method of cleaning. This study inferred the possible causal factors related to lifestyle habits in haemorrhoid patients which may be helpful for creating awareness in all population groups or educating the haemorrhoid patients, and avoid further complications or severity.

### Limitations

This was six month short duration project study, hence effective sample size was not achieved, and can be considered as pilot study, as there is no study in this area done previously. Further, this study may be extended to study the prevalence of lifestyle habits in haemorrhoid patients with a larger sample size.

### Conclusion

Haemorrhoids are one the common diseases observed due to faulty life style & defecatory habits, when not associated with other co morbidities can be modified to prevent the disease.

The patients were advised healthy lifestyle habits and have been explained that the disease can revert its course in early stages if proper precautions and healthy lifestyle habits are adopted.

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**Conflict of Interest: Nil**

**Source of support:Nil**