

## Original Research Article

# Study of risk factors and clinical features of hemorrhoids

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### ABSTRACT

**Background:** Hemorrhoids are very common diseases of the anal region and creates physical and psychological disturbances and significantly affects the quality of life. This study was aimed to determine the risk factors and clinical symptoms associated with it.

**Methods:** The study was conducted in Krishnarajendra Hospital, Mysore, for a period of one year from January 1984 to December 1984. A total of 40 patients with hemorrhoids were included in the study. The risk factors and clinical symptoms associated with incidence of hemorrhoids were noted in detailed and analysed.

**Results:** Male preponderance was seen in the study (85%). Patients with age group between 20-39 years were found of high incidence of hemorrhoids (55%). Out of 40, 15 (37.5%) males and 2 (5%) females had habitual constipation and 7 (17.5%) males had occasional constipation. Farmers were found to be the most commonly affected people with hemorrhoids (60%) followed by students (15%), households (15%) and business man (10%). The common clinical symptom observed was bleeding per rectum and mass per rectum in 85% of patients, pain during defecation in 77.5%, soiling of clothes observed in 22.5% and history of pruritus in 12.5% of males.

**Conclusions:** The patients suffering with hemorrhoids were suggested to adopt healthy life style and modifications at their occupations accordingly.

**Keywords:** Clinical features, Hemorrhoids, Incidence

### INTRODUCTION

Hemorrhoids are very common diseases of the anal region and constitutes about 50% of colorectal investigations.<sup>1</sup> Hemorrhoids if untreated can potentially pose serious medical problems and can also be a symptom of a bigger problem. Its incidence can be seen at any age and in both genders equally. It is estimated that 50-85% of people around the world had hemorrhoids. In India 75% of the population was affected.<sup>2</sup>

Many physiological changes of the anorectal region were evidenced with the development of hemorrhoids.<sup>3-6</sup> This is followed by constipation, bleeding, discharge of ucos, and prolapse of hemorrhoidal tissue.<sup>7</sup> This study aimed to

assess the risk factors and clinical features associated with hemorrhoids.

### METHODS

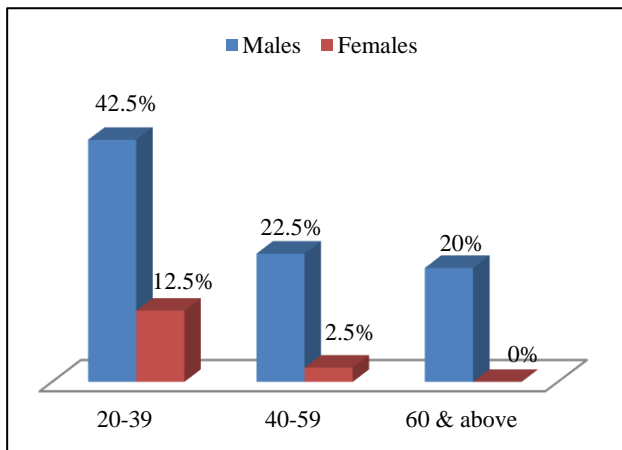
The present study was conducted for a period of one year in Krishnarajendra Hospital, Mysore, Karnataka, India. From January 1984 to December 1984. A total of 40 patients with hemorrhoids were included in the study.

Detailed clinical history was taken in all cases as per the proforma with particular reference to family history, personal history including occupation, financial status, previous history of hemorrhoids, bleeding per rectum, constipation, painful defecation discharge per rectum and

dietary habits. The history of pain, pruritis in anal region, history of soiling of cloths was asked with its duration and nature whether with mucous serous or blood. Detailed general physical examination was done in all patients. Each patient was subjected to detailed local examination of anus and rectum, proctoscopy, and sigmoidoscopy.

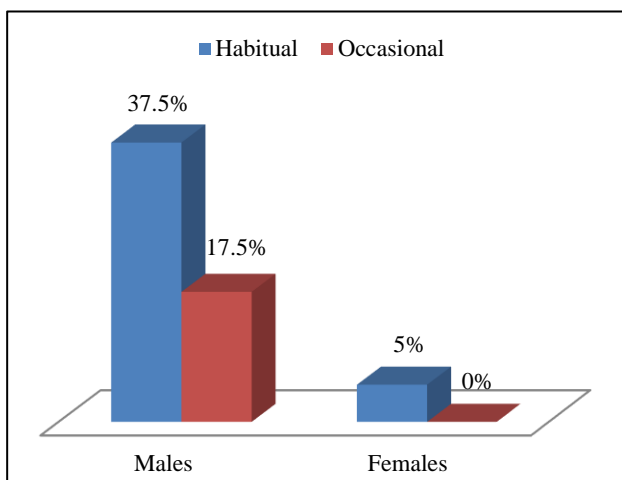
**RESULTS**

Figure 1 presents the demographic details of the patients. Male preponderance was seen in the study (85%). Patients with age group between 20-39 years were found of high incidence of hemorrhoids (55%).



**Figure 1: Distribution of patients according to age.**

Constipation was one of the risk factor associated with the incidence of hemorrhoids were given in Figure 2. Out of 40 patients of both sexes, 15 (37.5%) males and 2 (5%) females had habitual constipation and 7 (17.5%) males had occasional constipation.

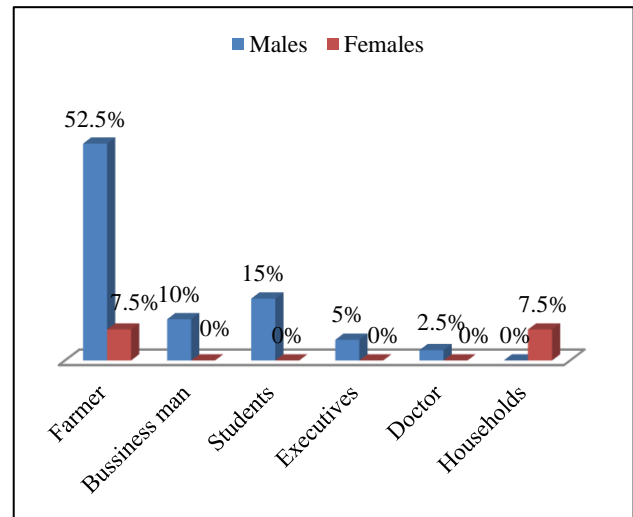


**Figure 2: Incidence of hemorrhoids based on type of constipation.**

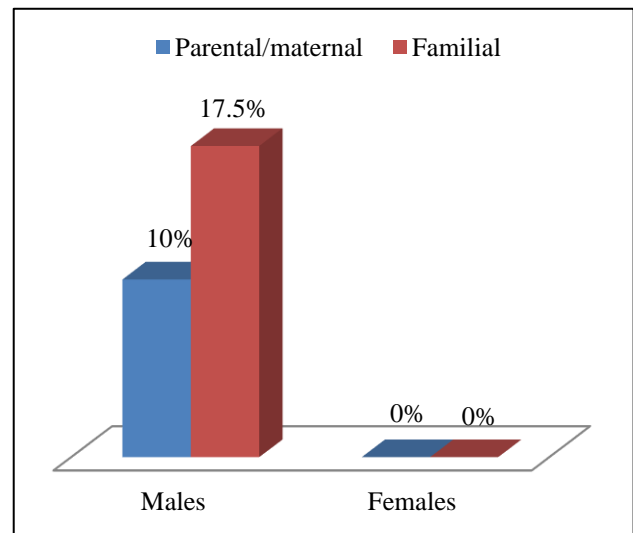
The incidence of hemorrhoids is mainly associated with occupational status of the patients as depicted in Figure 3.

Farmers were found to the most commonly affected people with hemorrhoids (60%) followed by students (15%), households (15%) and business man (10%).

Hereditary is also one of the risk factor to consider with the prevalence of hemorrhoids as shown in Figure 4. Family history of hemorrhoids was noted in 7 (17.5%) male patients and parental/maternal history was recorded in 4 (10%) male patients. No female patients had hereditary incidence of hemorrhoids.

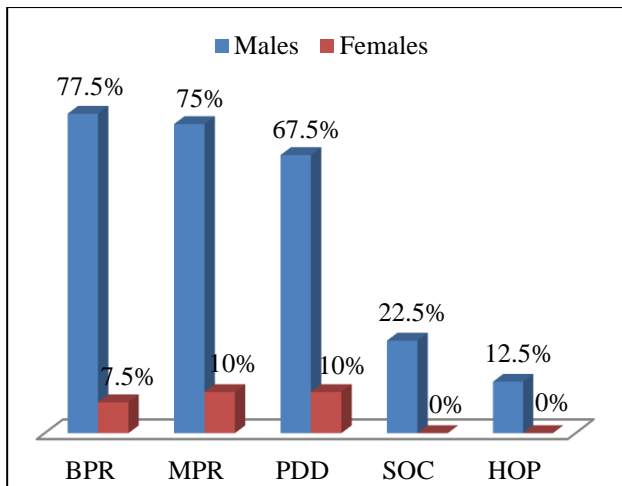


**Figure 3: Incidence of hemorrhoids based on occupation.**



**Figure 4: Incidence of hemorrhoids based on hereditary.**

Figure 5, depicts the clinical features of hemorrhoids in study participants. Bleeding per rectum was seen in 85% of patients (males- 77.5%, females-7.5%), mass per rectum in 85% (males- 75%, females-10%), pain during defecation in 77.5% (males- 67.5%, females-10%), soiling of clothes observed in 22.5% of males and history of pruritis in 12.5% of males.



BPR=Bleeding per rectum; MPR= Mass per rectum; PDD= Pain during defecation; SOC= Soiling of clothes; HOP= History of pruritus.

**Figure 5: Clinical features of hemorrhoids among study participants.**

## DISCUSSION

Hemorrhoids or piles are a common disorder among adults. More than half of men and women aged 50 years and above will develop hemorrhoid symptoms during their lifetime.<sup>8</sup> In the present study, male preponderance was observed (55%). This was in accordance with the studies of Khan et al.<sup>9</sup> On contrary, previous studies of Has et al and Johanson et al stated that the incidence and prevalence of hemorrhoids in both the sexes were approximately same.<sup>10,11</sup> In the present study, the prevalence of hemorrhoids was noted more in the age group of 20-39 years. This was in contrary with studies of Khan et al and Johanson et al.<sup>9,11</sup>

Constipation was believed to be one of the risk factor to cause hemorrhoids.<sup>12</sup> Many studies failed to correlate the incidence of hemorrhoids with constipation.<sup>11</sup> But constipation and straining during defecation may precipitate the development of symptoms such as bleeding and prolapse in patients with a history of hemorrhoidal disease.<sup>13</sup> In this study, constipation was seen more in males (42.5%) compared to females. This may be due to high attendance of male patients to the hospital or may be due to the reason that female patients feel shy to discuss about the anorectal disorders.<sup>14</sup>

In the present study, the incidence of hemorrhoids was observed more in farmers. This may be due to their high physical activity and standing for a longer period of time.<sup>15</sup> As shown in Figure 3, the prevalence of hemorrhoids was also higher in students (15%) followed by business man (10%) and doctors (2.5%). This was due to their sedentary life styles, prolonged standing or stress. Warshaw et al in his study noted that patients in whom occupation is associated with stress and strain are at higher risk of developing hemorrhoids.<sup>16</sup>

In this study heredity was seen as one of the risk factor for the incidence of hemorrhoids. About 4 (10%) had parental/maternal history and 7 (17.5%) had familial history of hemorrhoids. Several studies had shown that hemorrhoids do appear in certain family groups but clear evidence regarding the association of heredity and occurrence of hemorrhoids has not been established.<sup>9</sup>

The most common manifestation of hemorrhoids is rectal bleeding associated with bowel movement.<sup>15</sup> About 85% of the patients in the study had bleeding per rectum and mass per rectum as the main clinical symptom. These results were consistent with the previous studies.<sup>16,17</sup> Pain during defecation ranked the next. It was seen in 75% of the patients. Prolapsing hemorrhoids may cause perineal irritation or anal itching due to mucous secretion or fecal soiling.<sup>13</sup> In the present study, soiling of clothes was noted in 22.5% patients and pruritus in 12.5% patients. But in a study conducted by Nikooiyan et al on 120 patients, clinical symptoms observed in their patients as pruritus (45.8%), discharge (41.6%) and the lowest was anal pain (22.5%) respectively.

## CONCLUSION

Determining the association of risk factors as etiological factors of hemorrhoids is not easy and it requires conducting a large population based studies. In the present study, main emphasis was made in the risk factors and clinical symptoms of hemorrhoids among study participants. Occupation was considered as one main risk factor for the occurrence of hemorrhoids. Hence, the patients were suggested to adopt healthy life style and modifications at their occupations accordingly.

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*Ethical approval: The study was approved by the institutional ethics committee*

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