



## A clinical study on PERIANAL ABSCESS

<sup>1</sup>Dr. Rakesh Polisetti, <sup>2</sup>Dr. Paradeshi, <sup>3</sup>Dr. Prashanth Vallepu

<sup>1,3</sup>Resident, <sup>2</sup>Professor, Department of General Surgery, Krishna Vishwa Vidyapeeth, Karad, Maharashtra, India

**Corresponding author:** Dr. Rakesh Polisetti, Resident, Department of General Surgery, Krishna Vishwa Vidyapeeth, Karad, Maharashtra, India

**Email:** [RAKEE.polisetti@gmail.Com](mailto:RAKEE.polisetti@gmail.Com)

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### ABSTRACT

**Background:** Perianal abscess is a common acute disease in the field of colorectal surgery. The present study was conducted to assess cases of perianal abscess.

**Materials & Methods:** 60 patients of perianal abscess of both genders underwent computed tomography scan (CT) or magnetic resonance imaging (MRI). Surgical procedure was performed in all patients and tissue and fluid culture were sent at the time of surgery for analysis.

**Results:** Out of 60 patients, males were 35 and females were 25. Common symptoms observed were pain in 38, peri anal discharge in 42 and faecal incontinence in 15 cases. Associated comorbidity such as hypothyroidism was seen in 7, hypertension in 10 and peripheral arterial disease in 4 patients. Surgical procedure performed were laparotomy in 34, laparoscopic assisted procedures in 12, ileostomy in 5 and colostomy in 9 patients. The difference was significant ( $P < 0.05$ ).

**Conclusion:** Perianal sepsis were managed with laparoscopic assisted procedures, laparotomy, ileostomy and colostomy. Maximum cases were seen in males.

**Key words:** Anorectal infection, Perianal sepsis

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### Introduction

Perianal abscess is a common acute disease in the field of colorectal surgery.<sup>1</sup> Anorectal abscesses are classified into five types, with incidences defined: perianal, ischiorectal, intersphincteric, supralevator and submucosal.<sup>2</sup> Perianal suppurations have an incidence of 1–2:10,000 inhabitants per year and represent about 5% of all proctology consultations, being more frequent in males and occurring uncommonly in children.<sup>3</sup>

Spread to the peritoneal cavity and retroperitoneal space as well as necrotising fasciitis from anorectal abscesses and after treatment of haemorrhoids is rare and carries a substantial morbidity and even mortality.<sup>4</sup> Primary anorectal sepsis refers to bacterial invasion of the soft

tissues in the peri-anal area, which is most commonly associated with Crohn's disease (CD) and immunocompromise. Secondary anorectal sepsis results from dehiscence of a pelvic anastomosis after restorative proctocolectomy or low rectal resection.<sup>5</sup>

Perianal abscesses usually present with symptoms of severe perianal pain, fever and sometimes discharge. The key to their management is adequate and timely drainage. The main concern following drainage of an anorectal abscess is a fistula in ano. Rarely, they can have lethal sequel like necrotising fasciitis or very rarely spread either to the peritoneal or retroperitoneal spaces.<sup>6</sup> The present study was conducted to assess cases of perianal abscess.

### Materials & Methods

The present study comprised of 60 patients of perianal abscess of both genders. All gave their written consent for the participation in the study.

Data such as name, age, gender etc. was recorded. Rectal and abdominal examination was performed. All patients underwent computed tomography scan (CT) or magnetic resonance imaging (MRI). Surgical procedure was performed in all patients and tissue and fluid culture were sent at the time of surgery for analysis. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

### Results

**Table I Distribution of patients**

Total- 60		
Gender	Males	Females
Number	35	25

Table I shows that out of 60 patients, males were 35 and females were 25.

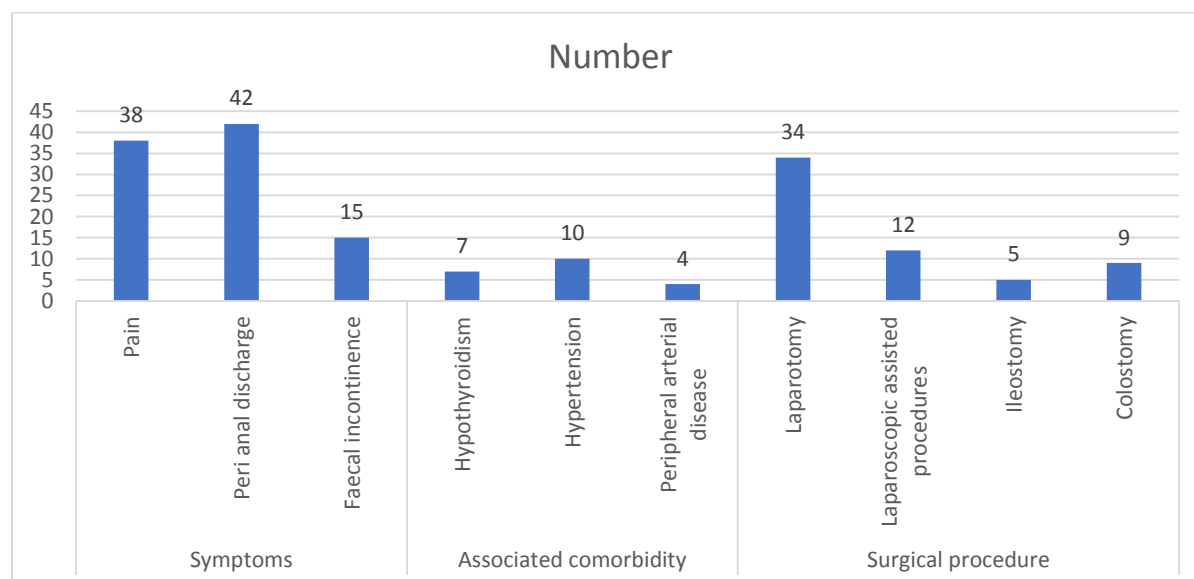
**Table II Assessment of parameters**

Parameters	Variables	Number	P value
Symptoms	Pain	38	0.91
	Peri anal discharge	42	
	Faecal incontinence	15	
Associated comorbidity	Hypothyroidism	7	0.04
	Hypertension	10	
	Peripheral arterial disease	4	
Surgical procedure	Laparotomy	34	0.05
	Laparoscopic assisted procedures	12	
	Ileostomy	5	
	Colostomy	9	

Table II, graph I shows that common symptoms observed were pain in 38, peri anal discharge in 42 and faecal incontinence in 15 cases. Associated comorbidity such as hypothyroidism was seen in 7, hypertension in 10 and peripheral arterial disease in 4 patients. Surgical

procedure performed were laparotomy in 34, laparoscopic assisted procedures in 12, ileostomy in 5 and colostomy in 9 patients. The difference was significant ( $P < 0.05$ ).

### Graph I Assessment of parameters



### Discussion

Anorectal infection and sepsis are common challenging problems. Although often used synonymously, sepsis and infection are different.<sup>7</sup> Sepsis are the systemic responses to local infection, including hyperthermia, tachycardia, tachypnea, hypotension and altered mental status. Fortunately, most patients with infectious anorectal diseases present with a localized abscess or fistula, without systemic toxicity.<sup>8</sup> Primary anorectal sepsis refers to bacterial invasion of the soft tissues in the peri-anal area, which is most commonly associated with Crohn's disease (CD) and immunocompromise. Secondary anorectal sepsis results from dehiscence of a pelvic anastomosis after restorative proctocolectomy or low rectal resection.<sup>9</sup>

Abscessotomy is typically performed for lower sepsis, and cutting seton is typically placed for upper sepsis.<sup>10</sup> The advantage of this treatment is the reduction in the formation rate of postoperative secondary anal fistula; however, at the same time, this treatment causes sphincter function injury and fecal incontinence in some patients. There has been a recent shift towards more aggressive management of patients with CD and anal fistulas.<sup>11</sup> Any surgical procedure for anal fistula should be preceded by a thorough identification of its components, namely internal and external openings, primary and secondary tracts, and by an assessment of the patient's continence. Placement of drainage catheters and noncutting setons, advancement flap closure of fistulas and selective construction of diverting stomas are preferred options which may postpone or even obviate the need for proctectomy and permanent stoma.<sup>12,13</sup> The present study was conducted to assess cases of perianal sepsis.

We found that out of 60 patients, males were 35 and females were 25. Neto et al<sup>14</sup> included 52 patients who underwent surgical treatment of anorectal and perianal abscess. All patients reported pain as a symptom, 23 patients (44.2%) reported perianal bulging and 9 (17.3%) informed discharge and signs of inflammation (17.3%). The mean time of progression of

symptoms was 6.5 days, ranging from 1 to 30 days. Half of the patients had no comorbidities, 21.2% were smokers and 15.4% were carriers of diabetes mellitus. In 47 patients(90.4%) only abscess drainage was carried out; in one case there was the need for a colostomy.

We found that common symptoms observed were pain in 38, peri anal discharge in 42 and faecal incontinence in 15 cases. Associated comorbidity such as hypothyroidism was seen in 7, hypertension in 10 and peripheral arterial disease in 4 patients. Surgical procedure performed were laparotomy in 34, laparoscopic assisted procedures in 12, ileostomy in 5 and colostomy in 9 patients. Mitra et al<sup>15</sup> found that the main presenting symptoms were pain and perianal discharge in six, abdominal pain in four, fever in two, perianal pain without discharge and faecal incontinence in one patient each. Three patients had an associated comorbidity such as hypothyroidism, hypertension and peripheral arterial disease. Akkapuluet al<sup>16</sup> assessed 93 patients with anorectal abscess and identified factors related to clinical recurrence. They found that there was no statistically significant correlation with respect to gender, age, type of abscess, use of a drain, and fistula identification in the first surgery. He et al<sup>17</sup> assessed 288 patients with perianal sepsis. Three patients were not followed, 98 patients did not receive surgical treatment or one-time radical surgery for perianal sepsis, and 187 patients were ultimately identified for the study. Anal fistula was present in 105 patients, and the rate of formation of secondary anal fistula was 56.15%. There was no statistically significant difference in the fistula formation rate between different types of sepsis and in patients with secondary anal fistula, there was no significant correlation between the location of sepsis and the type of secondary anal fistula.

The limitation the study is small sample size.

## **Conclusion**

Authors found that perianal sepsis were managed with laparoscopic assisted procedures, laparotomy, ileostomy and colostomy. Maximum cases were seen in males.

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