



General Surgery

CLINICAL PROFILE OF ACUTE PERIANAL PAIN AND THE OUTCOME OF ITS MANAGEMENT IN PES HOSPITAL, KUPPAM

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ABSTRACT

AIMS AND OBJECTIVES: To assess the various causes, clinical profile in the patients with acute perianal pain .
To assess the outcome of management among these patients. **MATERIALS AND METHODS:** The study entitled
“CLINICAL PROFILE OF ACUTE PERIANAL PAIN AND THE OUTCOME OF ITS MANAGEMENT IN A PES HOSPITAL, kuppam.”
was undertaken in the Department of General Surgery PES Hospital attached to PESIMSR, Kuppam, from June 2021 to June 2022. The study
consists of presenting cases with acute perianal pain during the study period, Diagnosis based on clinicopathological findings. **INCLUSION
CRITERIA:** All cases of acute perianal pain presenting to department of general surgery PES hospital, kuppam. **EXCLUSION CRITERIA:**
All medicolegal cases presenting to PES hospital ,Kuppam. Patients who are lost for follow up. **Results:** The fissure in ano has a slight female
preponderance. The sex incidence ratio is 1.7:1 in favor of females. The fissure in ano occurs more commonly in 3rd decade (i.e.) young adults.
The most common clinical presentation of the fissure in ano is painful defecation, which occurs in 27 out of 27 patients studied. The incidence of
both acute and chronic fissures was almost the same. Surgery in the form of open or closed lateral anal sphincterotomy forms the definitive
treatment, healing fissure in almost all patients with very few postoperative complications. Perianal abscesses are more common. They are
common in males than in females. The majority of times, both aerobic and anaerobic organisms are cultured from the perianal abscess's pus.
Incision and drainage is the mainstay of treatment for perianal abscess. Still, in some cases, an anal fistula may develop as a complication, which
is a chronic phase of an unhealed abscess treated accordingly. Fistula in ano is a critical, most familial disease due to crypto glandular infection
(anal glands) and has a complication of anorectal abscess. It is a curable disease by treating surgery and higher antibiotics, local antibiotics with
good postoperative wound management, like sitz bath for twice a day without closing the wound. Diagnosis is by history, clinical examination,
per rectal examination with 91 discharging sinus and pain histopathological examination of Fistula tract gives the nonspecific etiology of all the
study 50 cases, specific etiology is nil. All the cases should undergo surgery. Fistulotomy is better than fistulotomy because of complete healing
and no recurrence after surgery. Hemorrhoids are one of the oldest diseases that humanity suffered, causing significant discomfort, and the most
common clinical presentation is bleeding and mass per rectum. Commonly done surgical procedure is open haemorrhoidectomy popularized by
Milligan –Morgan. The results concluded that postoperative pain was less in closed hemorrhoidectomy and with early wound healing. It is the
treatment in grade 3 and 4 hemorrhoids, whereas conservative treatment is given in grade 1 and 2 hemorrhoids.

KEYWORDS :**INTRODUCTION:**

Perianal pain is pain around the anal region. It causes mild discomfort, but sometimes it is debilitating. It is mainly due to proctalgia fugax, chronic perianal pain syndrome, hemorrhoids, anal fissure, and less commonly due to inflammatory bowel disease proctitis, cancers, and rectal prolapse. The diagnosis is based on clinical history, physical examination, and additional work-up. The pain of proctalgia fugax is intense and sudden, generally lasting for a minute. The spasms can continue for an hour in rare cases. The pain is stabbing, sharp, or cramp-like at the anus. The attacks occur in clusters, appearing daily for a while and then disappearing for weeks or months. Pain-related to the levator ani syndrome is a constant or frequently occurring dull pain felt higher up inside the rectal passage. Ancillary tests performed according to the history and examination, and they may consist of a rectal examination, proctoscopy, or full colonoscopy, and in some instances, a barium enema. The various causes of perianal pain are as follows:

- 1.Perianal abscess
- 2.Fissure-in-ano
- 3.Hemorrhoids
- 4.Fistula-in-ano

1. PERIANAL ABSCESS

A perianal abscess is an acute phase of pus collection that arises from the cryptoglandular epithelial infection lining the anal canal or skin, which are the most frequent variety of anorectal abscess. It constitutes approximately 60% of anorectal abscess . It may spread caudally to present as a perianal abscess, or, rarely, superiorly above the anorectal junction to form a supra levator intermuscular or pararectal abscess (depending on its relation to the longitudinal muscle), as well as circumferentially in any of the three planes: intersphincteric/intermuscular, ischiorectal or pararectal supra levator. Sepsis unrelated to anal gland infection may occur at the same or other sites, including submucosal abscess (following haemorrhoidal

sclerotherapy, which usually resolves spontaneously), mucocutaneous or marginal abscess (infected hematoma), ischiorectal abscess (foreign body, trauma, deep skin related infection) and perirectal supra levator sepsis originating in pelvic disease underlying rectal disease, such as neoplasm and particularly Crohn's disease, may be the cause. Similarly, patients with generalized disorders, such as diabetes and acquired immunodeficiency syndrome (AIDS), may present with an anorectal abscess; in these patients, abscesses may run an aggressive course.^{1,5}

2. FISSURE IN ANO

Fissure-in-ano is the ulcer in the longitudinal axis of the lower anal canal. However, its exact incidence rate is unknown. It has been described with an etiology of hard stool, inappropriate diet, vaginal childbirth, previous anal surgery hypertonicity of anal sphincters. It may also be associated with some secondary conditions like anal carcinoma, tuberculosis, etc. This disease is not life-threatening but very painful for the sufferers. An anterior anal fissure is much more common in women and may arise following vaginal delivery. Perpetuation and chronicity may result from repeated trauma, anal hypertonicity, and vascular insufficiency, either secondary to increased sphincter tone or because the posterior commissure is less well perfused than the remainder of the anal circumference.^{2,6}

3. HEMORRHOIDS: Hemorrhoids are a widespread anorectal condition defined as symptomatic enlargement and distal shift of the anal cushions that affect millions of people, which is a major medical and socioeconomic problem. Various factors have been claimed to be hemorrhoidal development etiologies, including prolonged straining and constipation. The abnormal distortion and dilatation of the vascular channel, together with destructive changes in the supporting connective tissue within the anal cushion, is the most crucial finding of hemorrhoidal disease. An inflammatory reaction and vascular hyperplasia may be evident in hemorrhoids. Internal hemorrhoids (Greek: haima, blood; rhoos, flowing; synonym: piles, Latin: pila, a

ball) are anal cushions that are symptomatic and characteristically lie in the 3, 7, and 11 o'clock positions (with the patient in the lithotomy position). In addition, hemorrhoids may be observed between the main pile masses, in which case they are internal hemorrhoids at the secondary position. External hemorrhoids are venous channels of the inferior haemorrhoidal plexus deep in the skin surrounding the anal verge and are not true hemorrhoids; they are usually only recognized as an outcome of a complication that is most predominantly a painful single acute thrombosis. The most important cause, albeit relatively uncommon, is carcinoma of the anorectum, but there are many other causes, which may be categorized as follows: a. Local, e.g., anorectal deformity, hypotonic anal sphincter; b. Abdominal, e.g. ascites; c. Pelvic, e.g., gravid uterus, uterine neoplasm (fibroid, carcinoma of the uterus or cervix), ovarian neoplasm, bladder carcinoma; neurological, e.g., paraplegia, multiple sclerosis²

4. FISTULAIN ANO

A fistula-in-ano is a chronic uncommon communication, commonly lined to some extent by granulation tissue, which runs outwards from the lumen of anorectum (the internal opening) to an external opening on the skin the buttock or perineum (or, in women, rarely to the vagina). Anal fistulae may be found in connection with certain conditions, such as Crohn's disease, actinomycosis, tuberculosis, lymphogranuloma venereum, rectal duplication, foreign body and malignancy (which may also arise very rarely in a chronic fistula), and suspicion of these should be aroused if clinical findings are uncommon. However, most are termed idiopathic, or cryptoglandular, nonspecific, and intersphincteric anal gland infection is deemed central to them. Non-specific anal fistulae are less common in women than men. The overall incidence is about 9 cases per one lakh population/ year in Western Europe, and those in their 3rd, 4th, and 5th decades of life are most commonly affected. Patients frequently complain of purulent discharge intermittently (which can be bloody) and pain. The passage of feces or flatus through the external opening suggests a rectal rather than an internal anal opening.⁴

AIMS AND OBJECTIVES:

To assess the various causes, clinical profile in the patients with acute perianal pain To assess the outcome of management among these patients.

MATERIALS AND METHODS:

The study entitled "CLINICAL PROFILE OF ACUTE PERIANAL PAIN AND THE OUTCOME OF ITS MANAGEMENT IN A PES HOSPITAL, KUPPAM" was undertaken in the Department of General Surgery PES Hospital attached to PESIMSR, KUPPAM, from June 2021 to June 2022. The material consists of inpatients in the four surgical units in PES hospital. The study consists of presenting cases with acute perianal pain during the study period, Diagnosis based on clinicopathological findings All patients presenting with ACUTE PERIANAL PAIN proforma drafted will be used. The baseline demographic data, including age, sex, Occupation, education status, habits, socioeconomic status, treatment, and history, will be taken.

1. STUDY DESIGN: PROSPECTIVE OBSERVATIONAL STUDY
2. STUDY SETTING: PESIMSR Hospital, KUPPAM
3. STUDY PERIOD: June 2021 to June 2022
4. STUDY POPULATION: All patients admitted in department of general surgery PESIMSR with diagnosis of acute perianal pain : June 2021 to June 2022
5. SAMPLING METHOD: By using purposive sampling technique the study will be conducted.
6. SAMPLE SIZE: 75 CASES
7. SELECTION CRITERIA:

INCLUSION CRITERIA: All cases of acute perianal pain presenting to department of general surgery PES HOSPITAL, KUPPAM.

EXCLUSION CRITERIA: All medicolegal cases presenting to PESIMSR, KUPPAM.
Patients who are lost for follow up.

TOOLS TO BE USED IN THE STUDY

- Clinical examination
- Digital rectal examination
- Proctoscopy
- All patients will be subjected to soft tissue scan and bedside routine investigations like CBC RBS, Renal parameters ,SERUM ELECTROLYTES

and PUS CULTURE AND SENSITIVITY.

- MRI when needed
- Endorectal ultrasound
- Contrast study like sinogram and fisulogram
- Clinical findings are documented in a pre defined proforma
- All patients will be subjected to relevant blood and radiological investigations and the values are noted

PROCEDURE FOR DATA COLLECTION

All patients coming to PESIMSR general surgery OPD with features of acute perianal pain will be subjected to detailed history and clinical examination . Written and Informed consent of the patient will be obtained prior to enrollment in the study.

In this study number of patients in the age group of patients in the age group 31-40 years are 13 that is 17% of the total number of patients in the age group 41-50 years are 26 that is 35% of the total , number of patients in the age group >51 years are 19 that is 25% of the total 75 patients.

Males are most commonly affected than females; among 75 patients, 50 males are affected, and 25 females are affected, where constitutes about 67% of the total affected are males and the remaining 33% affected are females.

The patients present with various symptoms like pain, swelling, bleeding, discharge, and mass per rectum. The most common symptom with which the patient presents is perianal pain that is seen in 62 patients, which accounts for 83% of the total 75 patients.

In this total of 62 patients, out of 75 patients have no external opening that constitutes about 83% of the total, and those presenting with one external opening are 13 that constitutes about 17% of the total patients.

Among 14 patients presenting with fistula in ano, four patients have anterior fistulae with the straight tract, and the remaining ten patients have posterior fistulae with a curved tract that constitutes about 71% of the total patients The number of patients presenting with anterior fissure is 1 that is 4% of the total; a number of patients presenting with posterior fissure are 26 patients that is 96% of the total 75 patients.

Among males number of patients with acute fissure are 4 that is 40% of the total males, and a number of patients with chronic fissure are 10 that is 60% of the total males. Among females number of patients with acute fissure are 7 that is 41% of the total females, and the number of patients with chronic fissure is 10 that is 59% of the total females

OBSERVATIONS:

Table 1: Age distribution.

Age (years)	Number of subjects	Percentage
<30	17	22.7 %
<31 to 40	13	17.3 %
41 to 50	26	34.7 %
>51	19	25.3 %
TOTAL	75	100 %

Table 2: Sex distribution.

Gender	Number of subjects	Percentage
male	50	66.7 %
female	25	33.3 %
TOTAL	75	100 %

Table 3: Distribution of study subjects according to Presenting complaints:

Presenting complaints	Number of subjects	Percentage
pain	62	82.7 %
Swelling	24	32 %
Bleeding	37	49.3%
Discharge	12	16 %
Mass per rectum	11	14.7%

Table 4: Distribution of study subjects according to Number of External opening:

Number of External opening	No of subjects	Percentage
0	62	82.7%
1	13	17.3%
Total	75	100%

Table 5: Distribution of study subjects according to Position

Position	No of subjects	Percentage
Anterior	4	28.6%
Posterior	10	71.4%
Total	14	100%

Table 6: Distribution of study subjects according to Post-op complaints.

Post-op complaints	No. of subjects	Percentage
Bleeding	2	2.7%
Discharge	9	12%
Infection	3	4%
Pain	41	54.7%
Recurrence	4	5.3%
flatus	6	8%
Nil	10	13.3%
Total	75	100.0

Table 7 : Distribution of study subjects according to clinical diagnosis

Clinical Diagnosis	No. of subjects	Percentage
AF	4	5.3%
Acute fissure	11	14.7%
B/L Perianal abscess	1	1.3%
Chronic fissure	16	21.3%
Grade 1	1	1.3%
Grade 2	3	4%
Grade 3	9	12%
Grade 4	1	1.3%
Left side perianal abscess	10	13.3%
PF	8	10.7%
PF and Fissure	1	1.3%
Right side perianal abscess	8	12%
Right Ischiorectal abscess and left side perianal abscess	1	1.3%
Submucosal perianal abscess	1	1.3%
Total	75	100.0

Table 8: Distribution of study subjects according to LOCATION

LOCATION	No. of subjects	Percentage
Anterior	1	3.7%
Posterior	26	96.3%
Total	27	100.0

Table 9 : Gender its association with Type among the subjects

Diagnosis	Operation done	
	CH	CM
Grade 1 hemorrhoids	0(0%)	1(50%)
Grade 2 hemorrhoids	2(17%)	1(50%)
Grade 3 hemorrhoids	9(75%)	0(0%)
Grade 4 hemorrhoids	1(8%)	0(0%)
Total	12(100%)	2(100%)

Table 10: Operation done its association with Diagnosis among the subjects:

Type	Gender	
	Male	Female
Acute fissure	4(40%)	7(41.2%)
Chronic fissure	6(60%)	10(58.8%)
Total	10(100%)	17(100%)

Table 11: Operation is done its association with Type among the subjects

Type	Operation done	
	Conservative Management	LAS
Acute fissure	7(87.5%)	4(21.1%)
Chronic fissure	1(12.5%)	15(78.9%)
Total	8(100%)	19(100%)

Table 12: Operation is done its association with Diagnosis among the subjects

Diagnosis	Operation done	
	Fistulectomy	Fistulotomy
Anterior fissure	4(44.4%)	0(0%)
Posterior fissure	5(55.6%)	3(100%)
Total	9(100%)	3(100%)

DISCUSSION:

Acute perianal pain is one of the most common presentations to the surgical outpatient department, and there are various causes for the perianal pain. The common causes are fissure in ano, perianal abscess, hemorrhoids, and fistula in ano. This study is a prospective observational study done in PES Institute of Medical Sciences and Research Hospital from June 2021 to June 2022. In the Study, The Patients were of age group 17 to 70 years. 75 cases were studied. Most of the patients in this study are in the age group of 41 to 50 yrs that constitutes about 35%, followed by in greater than 51 yrs of age that constitutes about 25% of the total 75 patients. Fissure in ano is a disease of young adults. Jensen SL studied 90 patients with an acute fissure in ano and reported a mean age of 45.53. Males are most commonly affected than females; among 75 patients, 50 males are affected, and 25 females are affected, where constitutes about 67% of the total affected are males and the remaining 33% affected are females. In socioeconomic status, 51 patients belong to low socioeconomic status, and 24 patients belong to high socioeconomic status. It is seen that 68% of the total 75 patients belong to low socioeconomic status, and 32% of patients belong to high socioeconomic status. It is seen in 25 patients who are unemployed and 50 patients who are employed that constitute 67% of the total 75 patients who are employed, and the remaining 33% constitutes unemployed. The patients presented with various symptoms like pain, swelling, bleeding, 81 discharge, and mass per rectum. The most common symptom with which the patient presents is perianal pain that is seen in 62 patients, which accounts for 83% of the total 75 patients. Total number of males in the age group 51 years are 12 that is 24% of the total 50 males, the number of females are 7 that is 28% of the total 25 females. A number of patients who were treated with conservative management in grade 1 hemorrhoids is 1 that is 50% of the total patients, the number of patients who took conservative treatment in grade 2 hemorrhoids is 1 that is 50% of the total patients who took conservative treatment, the number of patients who underwent closed hemorrhoidectomy are 2 that is 17% of the total 12 patients. The number of patients who underwent closed hemorrhoidectomy in grade 3 hemorrhoids is 9 that is 75% of the total 10 patients, the number of patients who underwent closed hemorrhoidectomy in grade 4 hemorrhoids are 1 that is 8% of the total 12 patients. Seong Y You et al.⁵⁹ conducted a study in which there were patients of 40 in 88 each group. Pain score at the time of recovery from the anesthesia was significantly lesser in the closed group ($P < 0.05$). Oxycodone hydrochloride was required for pain in 15 percent of patients in the closed group when compared to 45 percent in the open group ($P < 0.01$). The pain score at the first bowel movement was significantly lower in the closed group ($P < 0.01$). Wound healing was significantly faster in the closed group: 75 percent of patients in the closed group had healed by 3 weeks after the procedure compared to 18 percent in the open group ($P < 0.001$). The number of patients who underwent LAS in acute fissure is 4 that is 21% of the total 19 patients who underwent LAS, the number of patients who took conservative treatment is 7 that is 88% of the total 8 patients who took conservative treatment. The study by Jensen SL shows that in patients with the first episode of acute posterior anal fissure, simple measures such as warm sitz baths combined with a dietary intake of unprocessed bran may relieve symptoms significantly better than the application of lignocaine or hydrocortisone ointment to the anal canal.⁵³ The number of patients who underwent LAS in the chronic fissure is 15, which is 79% of the total 19 patients who underwent LAS; the number of patients who took conservative treatment is 1 that is 12% of the total patients who took conservative treatment. T Acar et al. conducted a study in the majority of the patients; the primary complaint was pain (92.3%) and bleeding during defecation (62%). Both healing of the fissure and pain relief, which are the components of the response to treatment, had not been observed in 56 (37.3%) patients of the 89 topical nitroglycerin ointment group until the second month. Among the recalcitrant patients in both topical nitroglycerin (56) and topical diltiazem ointment (47) groups, 27 (48.2%) and 36 (76.5%) patients underwent surgery, respectively. The best response to treatment was also obtained in the lateral internal sphincterotomy group. The number of patients who underwent fistulectomy is 9, and the number of patients who underwent fistulotomy is 3. Among anterior fistula number of patients who underwent fistulectomy is 4 that is 44% of the total patients who underwent fistulectomy. Among posterior fistula number of patients

who underwent fistulectomy is 5 that is 56% of the total patients who underwent fistulectomy. Among the posterior fistula number of patients who underwent fistulotomy are 3 that is 100% of the total who underwent fistulotomy. The number of patients with a fissure in ano is 27, among the total number of patients with acute fissure is 10, and the number of patients with chronic fissure is 17. Among males number of patients with acute fissure are 4 that is 40% of the total males, and the number of patients with chronic fissure is 10 that is 60% of the total males. Among females number of patients with acute fissure are 7 that is 41% of the total females, and the number of patients with chronic fissure is 10 that is 59% of the total females.

CONCLUSION AND SUMMARY:

The fissure in ano has a slight female preponderance. The sex incidence ratio is 1.7:1 in favor of females. The fissure in ano occurs more commonly in 3rd decade (i.e.) young adults. The most common clinical presentation of the fissure in ano is painful defecation, which occurs in 27 out of 27 patients studied. The incidence of both acute and chronic fissures was almost the same. Surgery in the form of open or closed lateral anal sphincterotomy forms the definitive treatment, healing fissure in almost all patients with very few postoperative complications. Perianal abscesses are more common. They are common in males than in females. The majority of times, both aerobic and anaerobic organisms are cultured from the perianal abscess's pus. Incision and drainage is the mainstay of treatment for perianal abscess. Still, in some cases, an anal fistula may develop as a complication, which is a chronic phase of an unhealed abscess treated accordingly. Fistula in ano is a critical, most familiar disease due to crypto glandular infection (anal glands) and has a complication of anorectal abscess. It is a curable disease by treating surgery and higher antibiotics, local antibiotics with good postoperative wound management, like sitz bath for twice a day without closing the wound. Diagnosis is by history, clinical examination, per rectal examination with 91 discharging sinus and pain histopathological examination of Fistula tract gives the nonspecific etiology of all the study 50 cases, specific etiology is nil. All the cases should undergo surgery. Fistulectomy is better than fistulotomy because of complete healing and no recurrence after surgery. Hemorrhoids are one of the oldest diseases that humanity suffered, causing significant discomfort, and the most common clinical presentation is bleeding and mass per rectum. Commonly done surgical procedure is open haemorrhoidectomy popularized by Milligan –Morgan. The results concluded that postoperative pain was less in closed hemorrhoidectomy and with early wound healing. It is the treatment in grade 3 and 4 hemorrhoids, whereas conservative treatment is given in grade 1 and 2 hemorrhoids.

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