OUTCOME OF FISTULA IN ANO AFTER INCISION DRAINAGE OF ACUTE PERI ANAL ABSCESS

Fazal Wadud¹, Zarka Asif², Asif Imran³, Saad Ali⁴, Ammad Ali⁵, Muhammad Ayub⁶

ABSTRACT:

OBJECTIVES:

To determine outcome of fistula in ano after incision drainage of acute peri anal abscess.

METHODOLOGY:

This descriptive case series study was conducted after approval of the Ethical committee. A total of 154 patients were observed for a six-month duration. Pre-design proforma was used to collect data. An inclusive criterion was age between 18-50 years of both genders with acute perianal abscess with low-level fistula (submucosal and mucocutaneous) and high-level fistula (ischiorectal and pelvirectal). Exclusive criterion was observed in all admitted patients who include secondary abscess formation for example diabetes mellitus, tuberculosis, and carcinoma with any previous history of fistula in ano. The result was analyzed through the SPSS-24 version.

RESULTS:

Ratio 35 (22.72%) was obtained for age group 18-30, 49 (31.81%) for age group 31-40 and 70 (45.44%) were in age group 41-50. The mean age was 38.25 years with SD \pm 9.70. The ratio of Males 143 (92.85%) leads high to females 11 (7.15%). The fistula was found in 64 (41.55%) patients postoperative after incision drainage for perianal abscess. Among 64 patients, 54 (37.01%) were male and 7 (4.54%) females. 90 (58.44%) patients had no fistula postoperatively. Low-level 45 (29.22%) and 19 (12.33%) high-level fistula was found in patients. Among the low-level ratio, 40 were male and 5 were female. Similarly, in high-level fistula 17 were male and 2 were female.

CONCLUSION:

Fistula is more common in males than females. Low lying fistula leads the chart more than a high lying fistula. The incidence of anal fistula in our observed patient's abscess was 41.55%.

KEYWORDS: Incidence, Perianal Abscess, Perianal Fistula

How to cite this article:

Wadud F, Asif Z, Imran A, Ali S, Ali A, Ayub M. Outcome of Fistula in Ano after Incision Drainage of Acute Peri Anal Abscess. J Gandhara Med Dent Sci. 2022;9(2): 35-37

Correspondence:

```
<sup>1</sup>Fazal Wadud, Medical Officer DHQ Hospital Upper Dir
♥: +92-316-5799172
⊠: drwadud047@gmail.com
<sup>2</sup>Bacha Khan Medical College Mardan
<sup>3</sup>Assisstant Professor Sur A Ward, Mardan Medical Complex MTI, Mardan
<sup>4</sup>Medical Officer –ICU,Mardan Medical Complex MTI, Mardan
<sup>5</sup>District Medical Officer, DHQ Hospital, Mardan
<sup>6</sup>Junior Registrar Sur A Ward Lady Reading Hospital, Peshawar
```

INTRODUCTION:

Among the most common Encounter diseases in

ano rectal region is a fistula, in adults, males are more prone than females¹. The relationship between fistula and abscess are common in etiology, pathophysiology, therapy, complication and anatomy². The study reported that incidence is about 2 cases per 10,000 populations per year in the age group 30-50 year³. Other studies reported that fistula is either associated with perianal abscess from outset or later sign in 26-37% of time⁴⁻⁶. In identified superficial fistulas in ano, primary fistulotomy should be attempted⁷. The study reported that many primary fistulotomies were done during drainage of abscess with no adverse effect⁸. The perianal abscess can cause systemic infection if left untreated; patients with recurrent or complex abscesses should be evaluated for chronic disease^{9,10}. The aim of this study was to determine outcome of fistula in ano after incision drainage of acute peri anal abscess, which will help surgeons to take a precise decision for management to reduce morbidity in our population.

METHODOLOGY:

This descriptive case series study was conducted after the approval of the Ethical committee at surgical "A" ward, Ayub Medical and Teaching Hospital Abbottabad. A total of 154 patients were enrolled in the study. Pre-design proforma was used to collect data. The duration of the study was from 19 November 2019 to 18 May 2020. Inclusion criteria include age group 18-50 years, both gender, acute perianal abscess with low and high-level fistula. Exclusive criteria include the previous history of fistula in ano and secondary abscess formation e.g., diabetes Mellitus, tuberculosis, Cohen disease and carcinoma. Sequels of concurrent disease or trauma where Fournier gangrene and horseshoe abscess were excluded. Data were analyzed through the SPSS-24 version.

RESULTS:

		Frequency	Percentage
Age	18-30	35	22.72%
	Years		
	31-40	49	31.81%
	Years		
	41-50	70	45.45%
	Years		
Gender	Male	143	92.85%
	Female	11	7.15%

Table 1: Age and Gender Distribution

The mean age was 38.25, SD \pm 9.70 years.

Table 2: Fistula Formation				
Fistula Formation	Frequency	Percentage		
Yes	64	41.55%		
No	90	58.44%		
Total	154	100%		

Body Surface Area Involved	Frequency	Percentage
Low-Level Fistula	45	29.22%
High-Level Fistula	19	12.33%
No Fistula	90	58.44%
Total	154	100%

DISCUSSION:

A study reported a result that is similar to our result¹¹. Treating fistula may reduce the late squeal but this could affect the function of the anal sphincter in some patients who may not have developed fistula in ano¹². The result showed fistula in 64 (41.55%) patients out of 154. The abscess as shown is more common in male patients 143 (92.85%) whereas females were 11 (7.14%) in number. 57 male patients were having fistula after drainage for perianal abscess and 7 were females. 45 patients were having low lying fistula whereas 19 patients have a high-level fistula. These results support the rule of secondary fistulotomy to avoid division of sphincter muscle who do not need it¹³. Patients aged less than 40 years and non-diabetic appeared to have a higher risk for fistula formation 43%¹⁴. Concluded that incidence of fistula-in-ano following incision and drainage of perianal abscess was 31%. Another study showed incidence following perianal abscess was 26% diagnosed within six months or follow-up¹⁵. Sample size, criteria, depth and size of abscess differentiate one study from another study. Our study concluded that the ratio of males is higher than females, which is similarly reported by another study also Frequently incision and drainage followed by a thorough wash and suturing lower defect in such cases with modern techniques¹⁶. Our study does not show an association between an enteric organism and fistula in ano.

CONCLUSION:

We conclude from this study that the incidence was 41.55% in our population. Fistula in males is more common than in females. The percentage and frequency of low-lying fistula is more than high lying fistula. We suggest avoiding division of anal sphincter muscle; secondary fistulotomy is advised to be done better when an anal fistula will be formed.

CONFLICT OF INTEREST: None

FUNDING SOURCES: None

REFERENCES:

- 1. Limura E, Giordano P. Modern management of anal fistula. World J Gastroenterol. 2015;21:12-20.
- Pearce L, Newton K, Smith SR, Barrow P, Smith J, Hancock L, et al. Multicentre observational study of outcomes after drainage of acute perianal abscess. Br J

Surg. 2016;8:1063

- 3. Hokkanen SR, Boxall N, Khalid JM, Bennett D, Patel H. Prevalence of anal fistula in the United Kingdom. World J Clin Cases. 2019;7(14):1795.
- Amin A, Junaid F, Nisar S. Pattern of Surgical Cases and its Management in Bacha Khan Medical Complex Shahmansoor Swabi. Journal of Gandhara Medical and Dental Science. 2017 Sep 1;4(1):8-12.Hasan RM. Incidence of fistula after management of perianal abscess. J Coloproctol (Rio de Janeiro). 2016;36:216-9.
- 5. Brar MS, Remzi F, Warusavitarne J, Datta I. Does antibiotic therapy prevent fistula in-ano after incision and drainage of simple perianal abscess?. Canadian Journal of Surgery. 2020 Aug;63(4):E362.Verkade C, Zimmerman DD, Wasowicz DK, Polle SW, de Vries HS. Loss of seton in patients with complex anal fistula: a retrospective comparison of conventional knotted loose seton and knot-free seton. Tech Coloproctol. 2020;24(10):1043-6.
- 6. Emile SH, Khan SM, Adejumo A, Koroye O. Ligation of intersphincteric fistula tract (LIFT) in treatment of anal fistula: an updated systematic review, meta-analysis, and meta-regression of the predictors of failure. Surgery. 2020;167(2):484-92.
- 7. Choi YS, Kim DS, Lee DH, Lee JB, Lee EJ, Lee SD, et al. Clinical characteristics and incidence of perianal diseases in patients with ulcerative colitis. Ann Coloproctol. 2018;34(3):138 43.
- Sahnan K, Adegbola SO, Tozer PJ, Watfah J, Phillips RK. Perianal abscess. BMJ Open. 2017;356:j475.
- 9. Stellingwerf ME, Van Praag EM, Tozer PJ, Bemelman WA, Buskens CJ. Systematic review and meta-analysis of endorectal advancement flap and ligation of the intersphincteric fistula tract for cryptoglandular and Crohn's high perianal

fistulas. BJS Open. 2019;3(3):231-41.

- Giamundo P, Esercizio L, Geraci M, Tibaldi L, Valente M. Fistula-tract laser closure (FiLaCTM): long-term results and new operative strategies. Tech Coloproctol. 2015;19:449-53.
- Zelić M, Karlović D, Kršul D, Bačić Đ, Warusavitarne J. Video-assisted anal fistula treatment for treatment of complex cryptoglandular anal fistulas with 2 years follow-up period: our experience. J Laparoendosc Adv Surg Tech. 2020;30(12):1329-33.
- 12. Hasan RM. Incidence of fistula after management of perianal abscess. J Coloproctol (Rio de Janeiro). 2016;36:216-9.
- Narang SK, Keogh K, Alam NN, Pathak S, Daniels IR, Smart NJ. A systematic review of new treatments for cryptoglandular fistula in ano. Surgeon. 2017;15(1):30-9.
- 14. Göttgens KW, Smeets RR, Stassen LP, Beets G, Breukink SO. Systematic review and meta-analysis of surgical interventions for high cryptoglandular perianal fistula. Int J Colorectal Dis. 2015;30:583-93.
- Sahnan K, Askari A, Adegbola SO, Tozer PJ, Phillips RK, Hart A, et al. Natural history of anorectal sepsis. Br J Surg. 2017;13:1857-65.
- 16. Shah A. A non-operative management of chronic anal fissure.: A study of 50 cases at town teaching hospital, Peshawar. Journal of Gandhara Medical and Dental Science. 2018 Mar 1;4(2):8-11.
- 17. Sahnan K, Askari A, Adegbola SO, Tozer PJ, Phillips RK, Hart A, et al. Natural history of anorectal sepsis. Br J Surg. 2017;13:1857-65.
- Balciscueta Z, Uribe N, Balciscueta I, Andreu-Ballester JC, García-Granero E. Rectal advancement flap for the treatment of complex cryptoglandular anal fistulas: a systematic review and meta-analysis. Int J Colorectal Dis. 2017;32(5):599-609.

CONTRIBUTORS

- 1. Fazal Wadud Concept & Design; Final Approval
- 2. Zarka Asif Data Acquisition; Data Analysis/Interpretation
- 3. Asif Imran Data Acquisition; Supervision
- 4. Saad Ali Data Analysis/Interpretation; Drafting Manuscript
- 5. Ammad Ali Concept & Design; Critical Revision; Final Approval
- 6. Muhammad Ayub Data Analysis/Interpretation; Drafting Manuscript