

A Prospective Study of Intra Anal Drainage of Subcutaneous Perianal Abscess

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Abstract: Perianal abscess is one of the frequently encountered surgical emergencies by the surgeons, particularly in developing countries. Early identification and effective drainage is the dictum in the management of perianal abscess. But, fistula formation is one of the unwanted complication after surgery, (especially in Subcutaneous perianal abscess & Ischiorectal Fossa abscess), and it has been a challenge to the surgeons from time immemorial. With this background in mind, we advocate a novel idea of draining the subcutaneous type of perianal abscess intra-analy (without external incisions) so that the probability of fistula formation is nullified. At the same time, adequate drainage is obtained with no recurrence so far, in our study.

Keywords: Perianal abscess, Intraanal drainage

I. Introduction

Perianal abscess is one of the frequently encountered surgical emergencies by the surgeons, particularly in developing countries. Early identification and effective drainage is the dictum in the management of these abscess. But, fistulous formation as a delayed complication after surgery has been a challenge to the surgeons from time immemorial. With this background in mind, we advocate a novel idea of draining the subcutaneous type of perianal abscess intra anally, without external incisions with the intent to prevent fistula formation especially in young unmarried girls.

II. Aims And Objectives

To study the efficacy and outcome of Intra-anal drainage of Subcutaneous type of perianal abscess and intersphincteric abscess.

III. Materials And Method

III.1. Study Design: Prospective Non-Randomized study.

III.2. Study Group: Over one year, 20 patients with subcutaneous and intersphincteric type of perianal abscess in General Surgery department of GMK medical college hospital, Salem was enrolled in our study. There were 12 males and 8 females with age preponderance of 15 to 70 year, the commonest age group being 25 to 35 years. 11 patients had subcutaneous type and nine of them had intersphincteric abscess.

III.3. Inclusion Criteria:

1. Patients with Subcutaneous type of perianal abscess.
2. Patients with intersphincteric abscess.
(All of them presenting for the first time)

III.4. Exclusion Criteria:

1. Ischio-rectal fossa abscesses (Trans-sphincteric)
2. Posterior Supra-levator abscesses.
3. Patients with history of previous I & D for perianal abscess.
4. Abscesses associated with Crohn's disease, Ulcerative colitis.
5. Abscess associated with fistula.
6. Immunodeficiency states.
7. With co-morbidities such as Diabetes mellitus

IV. Novel Idea Instituted

In our technique, the abscess is drained by a Transanal incision (as seen in fig 1). The abscess cavity is opened through an incision of the anoderm and the internal sphincter overlying the abscess. In this technique, the external incision is avoided. At the same time, adequate drainage is obtained by breaking the internal loculations through intra-anal route, avoiding the later complication of fistula formation, which is the commonest complication at the site of external drainage. Patients with systemic signs of toxicity are treated accordingly.



Fig 1: Intraanal Drainage

Fig 1 demonstrates the intra-anal method of drainage of peri-anal abscess as opposed to the conventional external drainage method as illustrated in Fig 2. Usually intra-anal method of drainage is used for anterior supra-levator and posterior infer-levator abscesses and external drainage is planned for all other types. But, fistulous track follows the external method in statistically significant nos. In our study, we have instituted the intra-anal method of drainage to drain the Inter-Sphincteric and subcutaneous types of perianal abscesses



Fig 2: Conventional External Drainage

Follow Up: Patients were followed up routinely for a period of one month postoperatively.

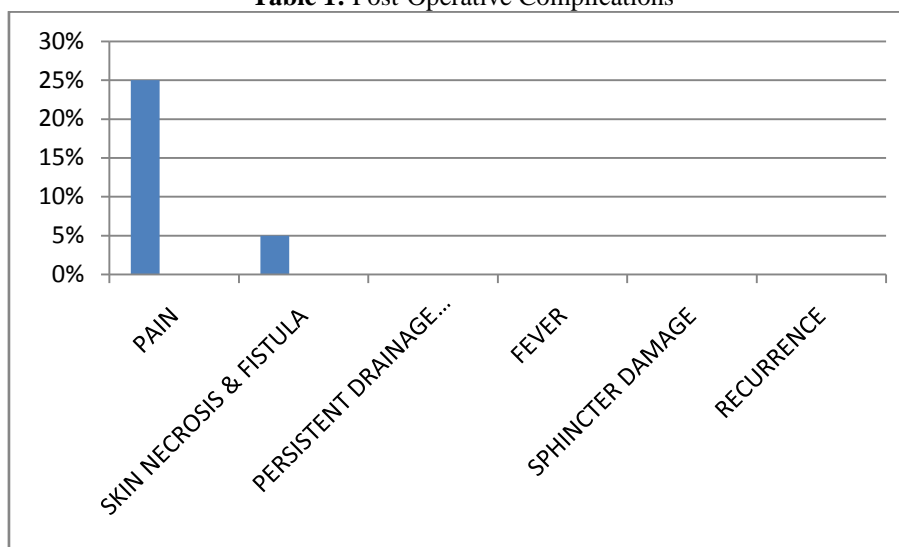
V. Results

Of 20 cases, 12 were males and 8 were females with age preponderance of 15 to 70 years, the commonest age group being 25 to 35 years.

Of the twenty cases studied, there was no undue post-operative complications except in one patient who developed skin necrosis and fistula formation, that is because he presented very late and was treated accordingly. The patients continued to have thin purulent discharge per anally for one or two days and then sero-

purulent discharge for few days until all the inflammatory process settles. All our patients were discharged in a good healthy condition. Postoperative pain was present in 25 % of patients beyond one day. But none had pain beyond four days.

Table 1: Post-Operative Complications



All The patients were discharged within 24 to 48 hours after I & D, except the one who had skin necrosis and external opening, who stayed in the hospital for 7 days. The duration of postoperative hospital stay ranged from 2 days to 7 days with a mean hospital stay of 1.5 days and mode being 2 days. Only one patient who had skin necrosis had a prolonged stay of 7 days. Regular follow ups were done postoperatively from the time of discharge for a period of one month and it revealed no recurrence or fistula formation except in one case.

The result of this study (Technique) lays the emphasis on the avoidance of injury to external sphincter and avoidance of complicated fistula formations. This technique uses the natural way of drainage of a perianal abscess and so this technique is an anatomically and functionally a sound procedure.

VI. Discussion

The incidence of Perianal abscess is demonstrably high with peak preponderance in young males. Perianal abscess usually originates in the proctodeal glands of Inter-sphincteric space. Subcutaneous, submucous, Inter-sphincteric and Ischio-rectal (Trans-sphincteric), Supra-levator extra peritoneal are different types of presentation of perianal abscess. Surgical management is the gold standard option, but with the risk of abscess recurrence, external sphincter damage and fistula formation in a statistically significant number. These complications not only create psychological trauma and morbidity to the patient but also scar the surgeon's name and fame.

Andreas Ommer et al first framed a guideline for diagnosis and treatment of anal abscess in Germany [1]. Hamalainen K.P et al described the incidence of fistulas after drainage of acute anorectal abscesses. [2]. Mappes H.J et al advocated synchronous fistulotomy to overcome the complications of external drainage [3]. With review of this literature and a better understanding of anatomy of anal canal we came to an understanding that spontaneous rupture of perianal abscess follows intra-anal course in uncomplicated cases. And also experience says that anterior supra- levator and posterior infra-levator abscess can be drained intra-anally. Considering this natural regression path and previous experience we intend to advocate a novel idea of Intra-anal drainage of Perianal abscess without making an external incision.

The result of this study (Technique) emphasis the avoidance of injury to external sphincter and avoidance of complicated fistula formation. This technique uses the natural way of drainage of a perianal abscess and so is an anatomically and functionally sound procedure.

This technique holds good to Subcutaneous abscesses (apart from anterior Supra-levator and posterior infra-levator) abscesses only who are presenting in an early period. Otherwise fistula formation is inevitable. Hence, the type of access should be planned depending on the type of perianal abscess [1]. This technique addresses the pathology both anatomically and functionally safe. The postoperative period is uneventful because, the entire procedure is intra-anal and so postoperative recovery of the patient is too smooth.

VII. Conclusion

Our technique uses the natural course of drainage of a perianal abscess and so this technique is an anatomically and functionally sound procedure. Postoperative pain and morbidity are minimized and hence duration of hospital stay is reduced. Complications such as external sphincter injury and fistula formation are rare that too in cases which are presenting late.

References

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