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**Comparison of postoperative complications of pre-anal abscesses in patients who have undergone penrose drain after drainage with perianal abscesses without drain in patients referred to Fatemi Hospital**  
**Abstract**

**Background:** Most purulent diseases of the anorectal are caused by infections of the anal glands (cryptococcal infection). These glands are located on the plate between the sphincters, and their ducts are emptied into the anal crypts after passing through the internal sphincter at the level of the dental line. Infection of the anal glands leads to the formation of abscesses. Perianal abscess treatment involves surgical drainage, which in about half of the cases causes fistulas and postoperative pain.

**Aim:** Due to the relatively high prevalence of the complication, the cost of controlling the side effects of these patients on the health system was decided to conduct a study to investigate the embedding of the drain in reducing postoperative complications in the analysis of pre-anal abscesses..

**Material and Methods:** This study is a cohort study. The statistical population of 80 patients who underwent abscess drainage and 40 patients who managed by penrose drain were compared with 40 patients who managed by packing and without drain. Basic information such as age, sex was obtained from patients at the beginning of the study, and postoperative pain, postoperative discharge, and fistula evidence were assessed after about 3 months.

**Results:** Out of a total of 80 patients, 78.8% were men and 21.2% were women. In terms of age, 5% were under 20 years old, 21.2% were between 20 and 30 years old, and 16.3% were between 30 and 40 years old, and 23.8% were between 40 and 50 years old. 50 to 60 years and 12.5 percent were over 60 years. Postoperative pain was severe in 1.2% of people after 3 months and recurred. 5% had moderate pain, 28.8% had mild pain, and 65% had no pain. 30% had fistula after 3 months. The study showed a significant difference between the group with the penrose drain and the group without the drain. Postoperative pain was so severe that the pain in the group with drains was much lower ( $P = 0.008$ ). There was also a significant difference in post-operative fistula formation between the group with the drain and the group without the drain, so that the fistula in the group with the drain was much smaller ( $P = 0.007$ ). This study showed that in terms of fistula occurrence between sexes There is no significant difference between men and women and different age groups. The study also showed that there was no significant difference between post-operative sex between men and women and different age groups. There were no reports of recurrences with drains, which was not statistically significant..

**Conclusion:** The results showed that post-drainage penrose drain of perianal abscesses significantly reduced the incidence of perianal fistula and reduced postoperative pain.

**Keywords:** Cryptoglandular glands. Perianal abscess. Internal and external sphincter