

# Study of pilonidal sinus treated with subcutaneous rotation flap: Case series of 34 cases

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## Abstract

Pilonidal sinus disease is an acquired relatively common condition and usually affects young, healthy and hairy males. Basically non-surgical treatment for this disease is not recommended. Present study describes the results of elliptical excision of Pilonidal sinus and rotation flap procedure as a surgical treatment option for Pilonidal sinus disease in a series of 34 cases. It is a cross sectional study. 34 patients who had been operated for primary or recurrent Pilonidal sinus disease using the elliptical excision of Pilonidal sinus and rotation flap procedure were included in the study. Informed consent was taken from each of the participant. The study participants were asked about their complaints and also regarding their satisfaction with the surgical treatment procedure. Physical examination of each of the patient was done and the hospital records were analyzed. The mean age of the patients was  $25.14 \pm 7.6$  years. Minimal flap necrosis was reported in two patients. Wound infection occurred in two patients. Two patients developed Seroma which had negative bacterial cultures; two study participants had partial wound dehiscence, while one study participant had purulent discharge. Mean duration of hospital stay was found to be 4.2 days whereas mean time for return to normal activity was observed to be eight days. Three patients had recurrence. All of the patients were satisfied with the final result except those with recurrence of the condition. To conclude, we found that elliptical excision of Pilonidal sinus and rotation flap procedure as a surgical treatment option for Pilonidal sinus disease was satisfactory with a low complication rate, short duration of hospitalization and also short time to return to normal activity.

**Keywords:** Sacrococcygeal pilonidal sinus disease, Subcutaneous Rotation Flap, Elliptical excision of Pilonidal sinus.

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Received Date: 26/03/2015 Revised Date: 30/03/2015 Accepted Date: 07/04/2015

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DOI: 22 May 2015

## INTRODUCTION

Pilonidal sinus disease is an acquired relatively common condition and usually affects young, healthy and hairy males<sup>1</sup>. It is a common infectious process which occurs in buttocks and sacral area which involves a wide range of symptoms that are different from an asymptomatic sinus abscess to acute and chronic sinus track. Basically non-surgical treatment for this disease is not recommended<sup>2</sup>. The treatment of this condition has been

quite challenging due to the associated infections, slow rate of wound healing and the problem of recurrence<sup>3,4</sup>. The optimal surgical method should be simple, require a short hospital stay and have lower recurrence rates<sup>5</sup>. Present study describes the results of elliptical excision of Pilonidal sinus and rotation flap procedure as a surgical treatment option for Pilonidal sinus disease in a series of 34 cases.

## MATERIAL AND METHODS

It is a cross sectional study. Thirty four patients who had been operated for primary or recurrent Pilonidal sinus disease using the elliptical excision of Pilonidal sinus and rotation flap procedure were included in the study. Informed consent was taken from each of the participant. The study participants were asked about their complaints and also regarding their satisfaction with the surgical treatment procedure. Physical examination of each of the patient was done and the hospital records were analyzed.

## RESULTS

Out of 34 patients included in the study, 31 were males and 3 were females. The mean age of the patients was  $25.14 \pm 7.6$  years. Minimal flap necrosis was reported in two patients. Wound infection occurred in two patients. Two patients developed Seroma which had negative bacterial cultures; two study participants had partial

wound dehiscence, while one study participant had purulent discharge. Mean duration of hospital stay was found to be 4.2 days whereas mean time for return to normal activity was observed to be eight days. Three patients had recurrence. All of the patients were satisfied with the final result except those with recurrence of the condition



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

## DISCUSSION

The present study describes results of elliptical excision of Pilonidal sinus and rotation flap procedure as a surgical treatment option for Pilonidal sinus disease in a series of 34 cases. We found that elliptical excision of Pilonidal sinus and rotation flap procedure as a surgical treatment option for Pilonidal sinus disease was satisfactory with a low complication rate, short duration of hospitalization and also short time to return to normal activity. Literature is found in support of the excision and flap procedures for the surgical management of Pilonidal sinus disease. Akmal Jamal *et al*<sup>6</sup> have concluded in their study that ‘despite longer operative time and demanding surgical skills, Limberg flap due to its low rates of recurrence and comparatively few complications is preferable over simple excision and secondary healing in the management of sacrococcygeal pilonidal sinus’. Similarly, Urhan MK *et al*<sup>7</sup> have mentioned from their study that ‘Rhomboid excision and Limberg flap procedure can be performed for managing primary or recurrent pilonidal sinus with a low complication rate, short hospital stay, short time to return to normal activity, and good long-term results’. Also, Bali I *et al*<sup>8</sup> concluded that ‘use of the Limberg flap

was associated with lower complication rates, shorter length of hospital stay, early return to work, low pain score, high patient satisfaction and better complete healing duration’. Thus, elliptical excision of Pilonidal sinus and rotation flap procedure as a surgical treatment option for Pilonidal sinus disease can be recommended as a satisfactory procedure with a low complication rate, short duration of hospitalization and also short time to return to normal activity.

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Source of Support: None Declared  
Conflict of Interest: None Declared