

# “Pilonidal Sinus” Mass Closure (with Prolene no. 1 having 90mm needle) after simple excision

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## ABSTRACT

**Aim:** To evaluate the efficacy of mass closure (with prolene no. 1 having 90mm needle) after simple excision for pilonidal sinus.

**Methods:** The study was done in Bahawal Victoria Hospital in 36 patients (all male) over a period of 1 year from January 2009 to January 2015. All the patients underwent excision of pilonidal sinus with an elliptical incision which included all of the pilonidal sinus and all of its tracts and the wound was then closed in mass with prolene no. 1 having a 90 mm needle after adequate hemostasis. Intravenous Ceftriaxone 1 g was used as a prophylaxis for infection. Patients were discharged on 2nd post op day on oral co-amoxiclav. Prolene sutures were removed at 10th post Op day. Patients were asked to come for follow up on 10th, 6 months and 1 year.

**Results:** Wound was healed in most of cases at 10th post op day. Only 2 out 36 patients came to us with recurrence of the pilonidal sinus after 1 year of surgery.

**Conclusion:** Mass closure with prolene after simple excision of pilonidal sinus is very efficacious in terms of fast recovery and low recurrence rate.

**Keywords:** Pilonidal sinus, excision, mass closure

## INTRODUCTION

Pilonidal sinus is a complex disease that is often difficult to treat<sup>1</sup>. The disease usually occurs in obese and hairy individuals that have sedentary lifestyles and, in those individuals, who spend most of their time in sitting such as students and drivers<sup>1</sup>. This occurs most commonly in second or third decade of life. Pilonidal sinus most commonly situated in intergluteal cleft at sacrococcygeal region. The proposed etiology is still an enigma, yet Boscom and Karydakos have presented their theories in order to understand the disease<sup>9,10</sup>. However it is a well-known fact that the etiology involves micro-trauma from the ingrowing hairs that cause inflammation<sup>1,2</sup>.

Pilonidal sinus usually presents as an abscess or as a chronic discharging sinus<sup>3</sup>. It is rarely fatal; however, the disease is unpleasant and causes significant morbidity<sup>4</sup>. There are several procedures that are performed to treat the disease yet none of them have been proved to be recurrence free. Recurrence is around 21%.

Ideally, surgery for this benign condition should be minimal, resulting in primary wound healing, resolution of sepsis, rapid return to full activity and no recurrence. There are several surgical approaches for this disease. The surgical wound may be left to heal by open healing (secondary intention)<sup>5,6</sup>. The wound may be closed to heal by primary closure<sup>7,8</sup>.

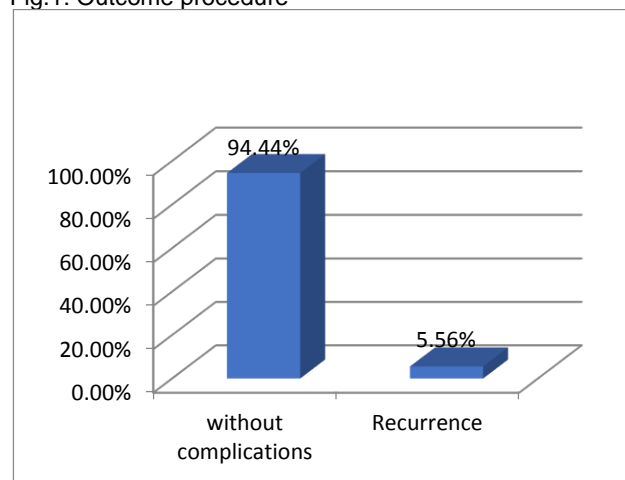
## MATERIAL AND METHOD

This study was conducted in surgical ward 2 at Bahawal Victoria Hospital Bahawalpur between January 2009 to January 2015. This study was approved by the Ethical Committee of the institution. Thirty six patients were included who came to us in surgical Outdoor Department

(OPD) with sacrococcygeal pilonidal sinus. The patients were admitted 1 day prior to surgery. Baseline investigations (CBC, LFTs and RFTs) were performed and anesthesia fitness taken. The patients were operated in spinal anesthesia. The patients were put in prone position and an elliptical incision was made, the whole track of the pilonidal sinus was excised, hemostasis secured. The resultant wound was closed with prolene no 1 suture having a 90mm needle on it. First all ties were passed then closed at the end. 1gm of ceftriaxone was injected in perioperative period for prophylaxis. All the patients were discharged 2nd post op day on oral antibiotics (co-amoxiclav 1g) and analgesics. The patients were advised to return to surgical OPD on 10<sup>th</sup> day, at 6<sup>th</sup> month and at 1 year.

## RESULTS

Fig.1: Outcome procedure



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All the patients were male with median age of 30 years (range 20 to 40 years). All the patients recovered well during the post op period and discharged on 2<sup>nd</sup> post-op day. Prolene sutures were removed at 10<sup>th</sup> post-operative day. Wound was fully healed on 10<sup>th</sup> day in all patients. Two out of 36 patients (5.56%) experienced the recurrence of the disease within 1 year of the procedure.

## DISCUSSION

Several methods have been used to treat pilonidal sinus surgically, each having its own complications and recurrence rate. The ideal surgical approach involves low recurrence rate, rapid healing, lower cost and less postoperative pain. The procedure must be simple and should not require cumbersome post-operative care of wound and hospitals follow up.

Simple excision of the pilonidal sinus has proven to be efficacious in eradicating the problem<sup>12</sup>. Some of the surgeons like to close the wound primarily others lay open the wound. Limited closure and marsupialization have also been described.

There are some other techniques such as Limberg, Karydakias and Bascoms flaps<sup>9,10,11</sup>. Each having its own complications. these procedures are very sophisticated, time consuming and require surgical expertise. And often the problem tends to recur after the procedures.

Our approach to the pilonidal disease is very simple yet very effective. The recurrence rate and infection rate both are very low in our patients. The principle behind good results is that by this method of closing the wound by prolene no 1 suture, we obliterate the dead space. Wound healing is by primary intention and patient has to bother less regarding wound discharge. 1 year follow up seems to be sufficient to assess the outcomes of the procedure<sup>7,13</sup>.

## CONCLUSION

Simple excision with mass closure of pilonidal sinus with prolene no. 1 having 90mm needle has proven efficacious

in terms of faster recovery and low recurrence rate. It is very safe and easy approach to a difficult problem.

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