



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF  
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.1461885>Available online at: <http://www.iajps.com>

Research Article

**PILONIDAL SINUS: A PROSPECTIVE STUDY**<sup>1</sup>Dr. Iqra Marjan, <sup>2</sup>Dr. Kinza Asghar, <sup>2</sup>Dr. Kamran Awais Islam,<sup>1</sup>Holy Family Hospital Rawalpindi<sup>2</sup>Government Kot Khawaja Saeed Teaching Hospital, KEMU, Lahore**Abstract:**

**Objective:** Pilonidal sinus found at the area of sacrum and coccyx is very common problem. Various medical and surgical procedures are used for the rectification of this problem with different ratio of success. There is no standard surgery in practice for this problem which can be confirmed as its final solution. A simple removal with the help of surgery is concluded with better consequences.

**Methodology:** The surgery of 32 patients of this problem was carried out by our research team. The study started from January 2013 to December 2017. A simple removal of these body tissues was carried out with the help of surgery in all the participants. The data collected from the patients was put into chart for analysis.

**Results:** The average follow up duration was 11.7 months and its range was from six months to twenty four months. Only two patients were found with small dehiscence on the stitches line who also reported the administration for this problem. We found no reappearance of this problem again in the treated patients in the whole periods of follow up.

**Conclusion:** Simple removal of those body tissues with operation and normal stitching is the best procedure with best outcomes. A careful method, with follow up suggestion (cleanliness, removal of the hairs etc.) can produce the good impact on after operation results.

**Key Words:** surgery, Anaesthesia Healthiness, Pilonidal sinus, sacrum, analgesia.

**Corresponding author:**

**Dr. Iqra Marjan,**  
Holy Family Hospital,  
Rawalpindi

QR code



Please cite this article in press Iqra Marjan et al., *Pilonidal Sinus: A Prospective Study.*, Indo Am. J. P. Sci, 2018; 05(10).

**INTRODUCTION:**

The term Pilonidal sinus is identical with discrepancy: the straightforwardness of appearance is noticed dissimilarity to the hesitations covering its administrations. No proof of failure of its surgery has been reported [1]. The origination and development of this disease is still a mystery; it can have a hereditary origin [2] to well known Boscom's cascade [3]. The confusions about the origin of this disease are the cause of failure to its treatment. PS actually maintains its roots into the fat of the follicle infection [1]. This is a rare disease with only twenty six cases out of one lakh. The targets of this problem are mostly youngsters of our society [1]. The most known able definition of victim of this disease is 'a vigorous, obese, healthy man with a small pelvis' [4].

This disease is rarely life taking. Yet, this problem has unpleasant effects and takes a large number of man hours. Twenty one percent of reoccurrence of this problem was reported [5], which challenged the intelligence of surgeons to propagate the methods for its rectification [1]. The physical condition of this disease is helpful for choosing the best surgery method [3]. Some methods as sinotomy [6], the removal of the body tissues of problematic area and drainage [7] arise in the identified difference to such difficult activities as the Z-plasty [9] and Karydakias flap [8]. Development in the field of biotechnology revolutionized the treatment procedures of this issue with fibrin glue & lasers [10, 11]. No process was able to deceive the reappearance and failure of wound. This information has been collected from a survey carried out for the search of standard method to tackle this problem.

**METHODOLOGY:**

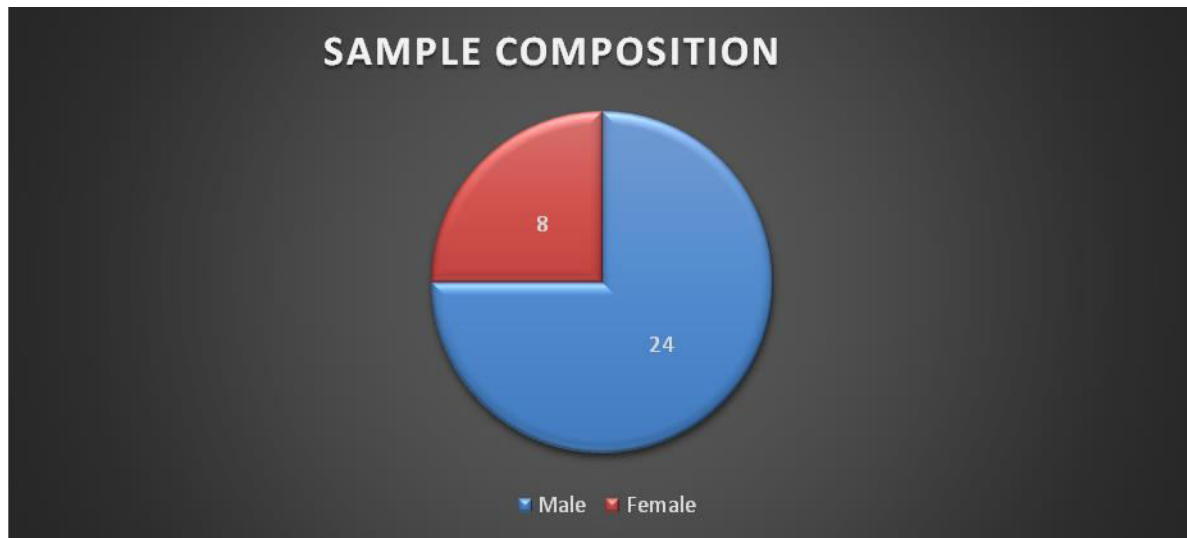
There were 32 participants of this research work. Those patients were suffering of PS in the area of sacrum and coccyx. They study started from January 2013 to December 2017. The participants were documented at 3 private hospitals and 1 government hospital in the city of Rawalpindi and the surgery of the participants was carried out according to the available facilities. Further checkups were carried out at the OPD of the same hospitals. All the participants got admission in the hospital on the day of operation. Haemoglobin baseline and anesthesia healthiness

were gained. Verbal willing of the participants was also taken. The hairs from the lower back portion on the just start of the buttocks line were cleaned 2 hours before operation. A similar method was used for all patients as described: After entry, the participants were laid flat with fat pillows placed under the upper part of thighs and lower part of the chest. Both sides of buttocks separated wide open and held there with the help of a tape made up of zinc oxide on each side. Now, the area of sacrum and coccyx was completely visible. Pyodine was applied on affected area; with the use of twenty three gauge needle one percent methylene dye was inserted into the affected area. The removal of the tissues from the affected areas was carried out according to the size and shape of the disease.

The incision was slowly deepened to reach the roots with the help of electrocautery. After clearance of the area deeply the tapes were removed to release the tensions which bring the ends of the wound close to each other. Initial closure of the wound was carried out with the use of vertical mattress method. Each stitch entered into the depth of the affected area by wounds to all patients and also included the front visible part of the wound. Gauze pads were used for the dressing of the wounds. Clindamycin was given to all the patients in the prescription. At the very first night after operation, analgesia was given to the patients who were further followed by ketorolac which was given orally. All the patients got their leave on next day from hospital with an advice to place soft pillow while sitting. The wound was checked on the fifth day after the surgery, the drain was also removed at that time. Stitches were removed on the eleventh day after the surgery. Checkups were continuously carried out at the intervals of 6 months.

**RESULTS:**

Twenty four males and eight females were the participants of this research work. The mean age of the participants was twenty eight years. The range of the patient's age was seventeen years to forty four years. Only 10 participants were fat by description i.e. having greater than ten percent from ideal body weight. All the participants were found with lesser or greater amount of excessive hairiness especially extravagant growth of hair in the area of sacrum and coccyx.



**Disease Spectrum:** Most of the patients were found with chronic type of this problem. This type was found in twenty five patients. Only two patients were found with repeated sinuses but only one patient existed with a serious swelling. We found no other complication related to the main problem.

**Post-operative Course:** No abnormality and dangerous situation was faced during the stay of patients in the hospital. When the removal of the drain carried out, the average fluid was documented as twenty millilitres. The range of the fluid was ten to forty millilitres. The fluid was both blood and liquid part of blood (serum) known as serosanguinous. When patients came for the removal of stitches, only two patients found with normal dehiscence on the line of stitches. This problem was further tackled with the help of dressings on regular basis with Solcoceryl gel. Both patients were found with best outcomes.

**Follow-up & Recurrence:** All the patients recommended to clean the hair at lower part of their back once in thirty days, keep good cleanliness. The average follow up duration was 11.7 months. The range of the duration was from six months to two years. No reappearance was faced by the patients during the hospital.

### DISCUSSION:

The removal of the body tissues and stitching is not a new method; it has been used by many specialists of the field [6, 12, 13]. The methods vary in some minor respects. An ideal method, with complete description, a proper standardized technique requires solving this as exasperating repetition frequencies. Ersoy [13] stated the high rate of problems among different methods of operation. The conclusions of Rabie and companions [6] stated the favour of the sinotomy in terms of duration in the hospital and reappearance of

the problem while comparing the sinotomy with primary closure.

The methods that do not utilize the main closure as sinotomy and unroofing causes an angry disturbance of personal cleanliness and normal dressings. There is a danger in the transplantation of the hairs abruptly after operation. There are many visible benefits as less harm to the tissues and local anesthesia provision, this method is best in cases of serious nature or where there are fewer pits [14]. The disease can effect deeply, in those cases, there is a need of 2<sup>nd</sup> special method to tackle it [15]. The chances of the recurring have aggravated the clever modifications in the methods [8-11]. Flaps use is a main task which requires long time for the healing of wounds and long hospital duration [8, 9, 13]. Ersoy [13] concluded the longest hospitalized duration with Limberg flap as compared to the other methods. The methods utilized by authors are neither too traditional nor too drastic, meeting the requirements to the concept of Aristotle 'keep on in the centre grounds'. The elliptical removal of the body tissues lower the dangers of soiling in the cases of serious nature. Nevertheless, a randomized controlled trial is probably in order here to answer the issue. Most reappearance is faced in the lower portion of wound [1]. Only 2 patients were found with minor failure of the wound at the site. The results of this research work are able to play a vital role in the establishment of an ideal method. The participants of this research work were ideal for inclusion in any method as they were healthy and found with no severe complications. The average follow up of less than 12 months is not enough to confirm the nil reappearance of the disease.

**REFERENCES:**

1. Sebastian MW. Pilonidal cysts and sinuses. In: Sabiston Jr DC (Ed) Textbook of surgery. 15th ed.
2. Bangalore, India: Prism Books Pvt. Ltd 1997;1330-3.
2. Hodges RM. Pilonidal sinus. Boston Med Surg J 1880; 103:456.
3. Boscom J. Pilonidal sinus. In Sazio VW (Ed). Current therapy in colon and rectal surgery. Toronto; BC Decker; 1990.
4. Franckowiak JJ. The etiology of pilonidal sinus. Unpublished thesis, University of Minnesota, 1960.
5. Jensen SL, Harling H. Prognosis of simple incision and drainage for a first episode acute pilonidal abscess. Br J Surg 1980; 75:60.
6. Rabie ME, Al Refeidi AA, Al Haizae A, Hilal S, Al Ajmi H, Al Amri AA. Sacrococcygeal pilonidal disease: sinotomy versus excisional surgery, a retrospective study. ANZ J Surg 2007; 77:172-80.
7. Hurst DW. The evolution of management of pilonidal sinus disease. Can J Surg 1984; 27:603.
8. Keshava A, Young CJ, Rickard MJ, Sinclair G. Karydakias flap repair for sacrococcygeal pilonidal sinus disease: How important is technique? ANZ J Surg 2007; 77:181-3.
9. Fazeli MS, Adel MG, Lebaschi AH. Comparison of outcomes in Z-plasty and delayed healing by second intention of wound after excision of the sacral pilonidal sinus: results of a randomized clinical trial. Dis Colon Rectum 2006; 49:1831-6.
10. Patti R, Angileri M, Migilore G, Sparancello M, Termine S, Crivello F, et al. Use of fibrin glue in the treatment of pilonidal sinus disease: a pilot study. G Chir 2006; 27:331-4.
11. Sadick NS, Yee-Levin J. Laser and light treatment for pilonidal cyst. Cutis 2006; 78:125-8.
12. Kronborg O, Christensen J, Zimmerman-Nielsen C. Chronic pilonidal disease: a randomized trial with a complete three year follow-up. Br J Surg 1985; 72:303.
13. Ersoy OF, Karaca F, Kayaoglee HA, Ozkan N, Celik A, Ozum T. Comparison of different surgical options in the treatment of pilonidal disease: retrospective analysis of 175 patients. Kaohsiung J Med Sci 2007; 23:67-70.
14. Karydakias GE. New approach to the problem of pilonidal sinus. Lancet 1973; 2:1414.
15. Kement M, Oncel M, Kust N, Kapatanoğlu L. Sinus excision for the treatment of limited chronic pilonidal disease: Results after a medium term follow-up. Dis Colon Rectum 2006; 49:1758-62.