

To Evaluate the Outcome of Sacrococcygeal Pilonidal Sinus Excision Using Karydakis Technique

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ABSTRACT

Objective: To evaluate the outcome of sacrococcygeal pilonidal sinus excision using karydakis technique.

Study Design: Prospective case series study.

Place and Duration of Study: This study was carried out in the Department of General Surgery Unit III, Ward 26, Jinnah Post graduate Medical Centre, Karachi from March 2005 to Feb 2012.

Materials and Methods: The study included 85 consecutive patients who underwent pilonidal sinus excision by karydakis technique fulfilling the inclusion criteria. We excluded the cases of pilonidal abscess and the cases which came with acute infections. Patients under 12 years were also excluded. A prospective method of data collection was utilized by filling in the proforma designed for the study. A complete record of the procedure, follow up was done initially on weekly basis for one month and then fortnightly for 6 months and subsequently monthly for 30 months.

Results: Total of 85 patients were included in our study in which 68 (80%) were male and 17 (20%) were female. The mean age of the group was 30.56 years. All patients were followed postoperatively for 30 months. Mean hospital stay was 2.5 days. Majority 63(74.1%) of the patients underwent smoothly without major complication. In all 85 patients wound closed with prolene 2/0 interrupted sutures. In 9(10.6%) patients developed minor wound infection while 4(4.7%) patients develop wound dehiscence and 3(3.52%) patients develop recurrence. In all 85 patients prophylactic antibiotics amoxicillin + clavulanic acid 1.2gm was used. In infected patients accounting to a total of 13(15.3%), both major and minor infections were included and appropriate antibiotic was used as indicated in the culture and sensitivity report.

Conclusion: Karydakis technique is superior to midline excision surgery. It is associated with significantly shorter complication rate, shorter hospital length of duration, rapid healing, cost effective, good cosmetic satisfaction, a high patient satisfaction rate and low rate of recurrence.

Key Words: Sacrococcygeal Pilonidal, Karydakis Technique, Complication.

INTRODUCTION

Pilonidal means pertaining to a nest of hair' (latin:pilus=hair, nidus=nest).Initially thought to be congenital in origin, pilonidal sinus disease is now thought to be an acquired disease.^{1,2} The mode of origin of a pilonidal sinus is now believed to be that: on sitting, the buttocks take the weight of the body, and move independently, or together. Hairs broken off by friction against clothing, and shed short hairs, from the nape of the neck, back, or buttocks, tend to collect in the cleft of the nates and/or a post anal dimple. Furthermore, it is suggested that the use of toilet paper may contribute to hair entangled in fecal matter being swept into the cleft; pilonidal sinus is extremely rare in those races that employ ablution after defecation.³ According to Hodges in 1880, pilonidal sinus disease, is an epithelial tract at the natal cleft.⁴ Herbert Mayo in 1883, describe a disease that involve a hair at the base of the coccyx.⁵ Pilonidal sinus is common disease that affect young people.⁶ There are various surgical options for the treatment of pilonidal sinus disease, Controversy still exists as to the best technique, however Karydakis

technique proves to be with lower post operative complication rate, shorter hospital stay and good cosmetic satisfaction.⁷

MATERIALS AND METHODS

This study was carried out in the department of general surgery unit III ward 26, Jinnah Post graduate Medical Centre, Karachi, from March 2005 to Feb 2012.

The study included 85 consecutive patients who underwent pilonidal sinus excision by karydakis technique fulfilling the inclusion criteria. We excluded the cases of pilonidal abscess and the cases which came with acute infections. Patients under 12 years were also excluded. A prospective method of data collection was utilized by filling in the proforma designed for the study. A complete record of the procedure, follow up was done initially on weekly basis for one month and then fortnightly for 6 months and subsequently monthly for 30 months.

RESULTS

Total of 85 patents were included in our study in which 68 (80%) were male and 17 (20%) were female (Chart 1). The mean age of the group was 30.56 years. 60 (70.6%) had external opening with clean margins and no signs of acute inflammation but discharge was positive. 64 (75.3%) presented with tufts and hair at sacrococcygeal area having scarcely present hair.

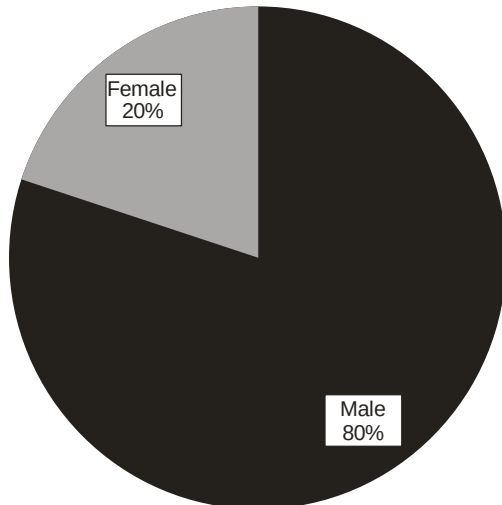


Chart No.1: Gender Distribution

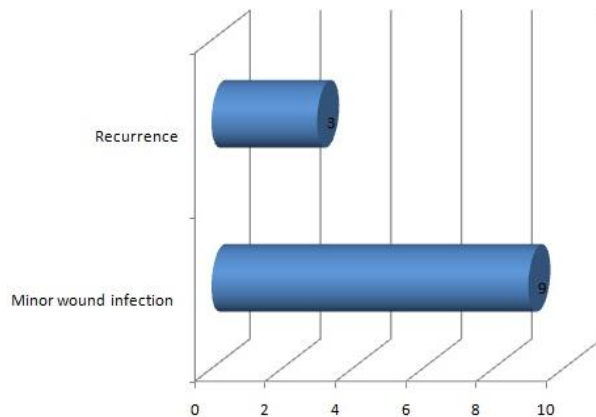


Chart No.2: Complications of Surgery

All patients underwent karydakis technique with primary closure and complete excision of the sinus. Gentian violet was used to outline the tract of the sinus in all the cases. All patients were followed postoperatively for 30 months. Mean hospital stay was 2.5 days. Majority 63(74.1%) of the patients underwent smoothly without major complication. The stitches were removed on 10th postoperative day. In all 85 patients wound closed with prolene 2/0 interrupted sutures. In 9(10.6%) patients developed minor wound infection while 4(4.7%) patients develop wound dehiscence and 3(3.52%) patients develop recurrence. In all 85 patients prophylactic antibiotics amoxicillin + clavulanic acid 1.2 gm was used. In infected patients

accounting to a total of 13(15.3%), both major and minor infections were included and appropriate antibiotic was used as indicated in the culture and sensitivity report.

DISCUSSION

Current surgical treatment of pilonidal sinus are based in primary closure with closure away from the midline. Identification of the tract and its internal extensions are key for the successful surgery. Gentian Violet was used for delineation of the tracts. Complete excision of the sinus and primary closure is an effective treatment for chronic pilonidal sinus treatment.⁸⁻¹² Younger male preponderance found in our study are same as seen in various other studies.^{6,8,13-14} Most frequent symptom was seropurulent discharge, as supported by other studies.¹⁵ The mean operative time was (45.3 ± 10 minutes) as seen in.^{7,16} The primary closure using the karydakis technique was done in all the cases.^{7,8,10} The mean follow up was 30 months which is compatible with other studies.^{8,17} Recurrence in our study is 3.52% which is same as in various other studies, except the Sozen S etal study in which the recurrence is zero because they have used fibrin sealent and use of drains with Karydakis flap procedure.^{7,12,18} wound dehiscence occur in 2.35% patients in our study which is similar in other studies.^{12,15,16,19} with the exception in saylamB study in which obese patients had 8folds more wound dehiscence.²⁰ Hospital stay in our study was 2-5 days mean 3.6day.^{12,21} As revealed from our study many other studies also revealed feeling of complete healing good cosmesis and higher rate of patients satisfaction and decrease post-operative off work duration, also suggested that Karydakis procedure superior to midline excision surgery in patients with pilonidal disease.²²⁻²⁴

CONCLUSION

Karydakis technique is superior to midline excision surgery. It is associated with significantly shorter complication rate, shorter hospital length of duration, rapid healing, cost effective, good cosmetic satisfaction, a high patient satisfaction rate and low rate of recurrence.

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