

Karydakis Technique for Pilonidal Sinus: Revisited

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ABSTRACT

Aim: To evaluate the efficacy of Karydakis technique in reducing the recurrence rate of pilonidal sinus.

Design: Prospective study from Jan 2016 to Jan 2017

Methods: 30 patients with chronic pilonidal sinus were enrolled. Operated with Karydakis technique and evaluated mainly for infection rate, recurrence rate, duration of hospital stay and time off work.

Results: 30 patients were operated employing Karydakis technique. Infection rate was 14%, recurrence was nil, mean hospital stay was 3 days and time off work was 2-3 weeks. Complete wound healing was achieved in almost a month.

Conclusions: Karydakis technique is an effective and safe procedure with better results than simple excision and primary closure.

Keywords: Karydakis, Pilonidal sinus, recurrence

INTRODUCTION

Pilonidal disease refers to presence of an abscess or a sinus usually in the sacrococcygeal area containing hairs. Its aetiology remains largely speculative but generally its assumed that intergluteal cleft generates a kind of suction for hair to get drawn and trapped in the midline pits which later become traumatized and infected eventually leading to the formation of an abscess or a chronic sinus¹. Recurrence rate has been notoriously high in the range of 7-42%².

Commonly It is seen in young hirsute individuals with deep intergluteal clefts in the age group 17-38^{2,3,4}. Men are twice as affected as women. Poor hygiene, high body mass index, excessive sweating and prolonged sitting are other important risk factors^{5,6}.

Patient typically presents with pain, swelling, multiple discharging pits or sinuses in the sacrococcygeal area. Acute pilonidal abscess while mandates just incision, drainage and curettage, chronic sinuses or pits may require little more complex procedures in hope to ensure a permanent cure. These range from simple laying open of the track, wide excision and primary closure of the wound in midline, off midline to complex flap reconstructions⁷. However, two procedures celebrated quite an attention in addressing this disease in recent times, karydakis technique and limberg transposition flap. In this study, we intend to review and compare merits and demerits of the karydakis procedure as in our experience at our center.

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MATERIALS & METHODS

We enrolled 30 adult patients with clinical diagnosis of pilonidal sinus in the study admitted through outpatient department of district headquarters hospital Sargodha from Jan 2016 to Jan 2017. Patients with acute pilonidal abscess were for obvious reasons not included in the study. We assessed the results in terms of following outcomes. **Operative time:** Time from making the incision till the last stitch. **Recurrence:** reappearance of the signs and symptoms after complete healing of the wound. **Wound infection:** purulent discharge from the wound necessitating opening it with accompanying debridement with or without systemic signs.

- Hospital stay
- Time off work.

Patient was discharged after 3 days following operation with the drain unless drains already have gone dry in which case they were removed before sending patients home. Patients were called back for follow up on weekly basis. Stitches were removed after two weeks unless there were signs of infection like purulent discharge.

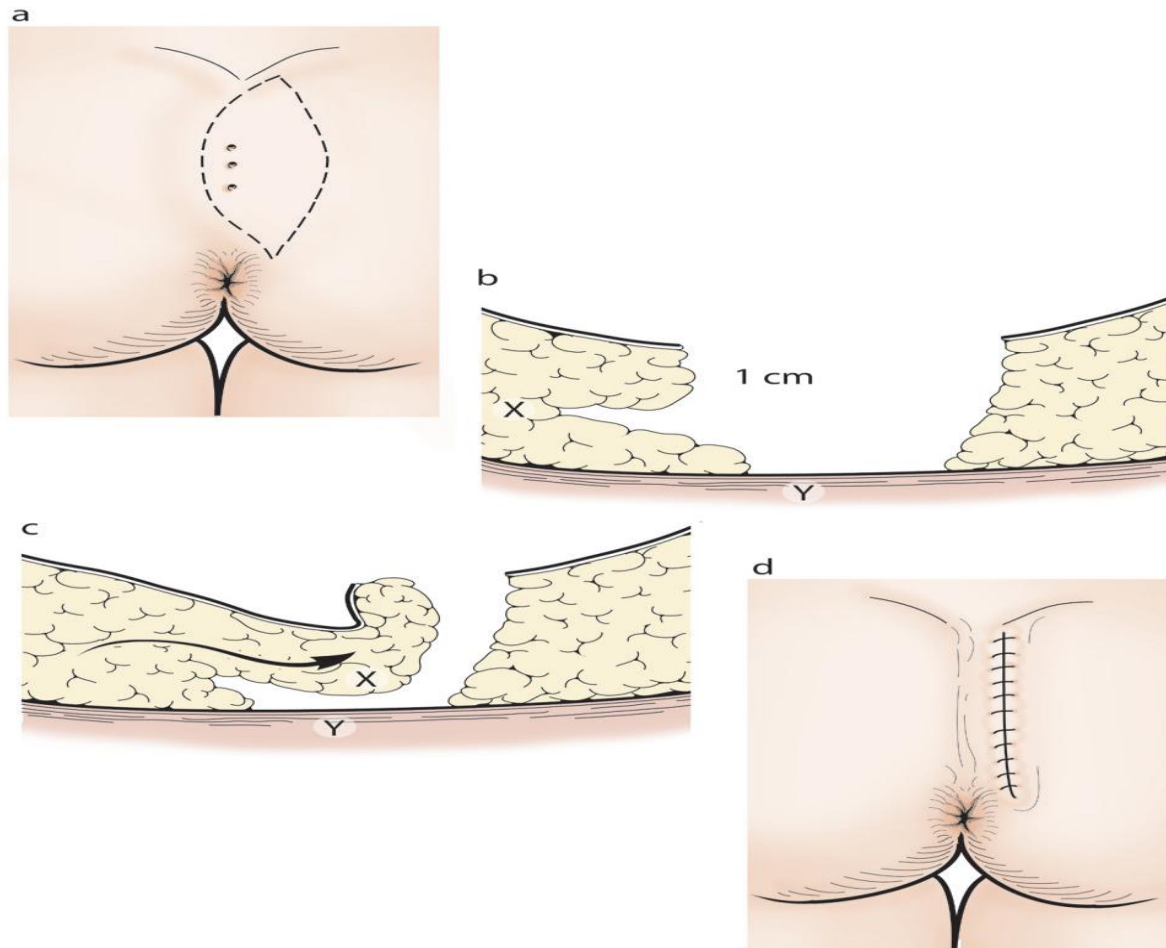
Karydakis technique involved making an elliptical incision around all sinuses 2 cm away from midline excising them to the level of sacrococcygeal fascia. The length of ellipse was kept at least 5 cm. The medial arm of the incision was than undermined for at least 2 cm at the interface of deep fascia and the muscle. Lateral arm was later stitched with the medial arm hence lateralizing the scar 2 cm away from midline.

RESULTS

There were a total of 30 patients enrolled for the study. There were 25 males(84%) and 5 females

(6%). Age range was 30 to 45 years with the mean age 35 years. All cases in our study happened to present with one or multiple discharging sinuses on one or both sides of the line. On an average, it took almost 45 minutes to complete the operation in an individual case. Mean hospital stay was 3 days and the time off work was 2 to 3 weeks on an average.

Four patients (14%) developed signs of infection ranging from accumulating little purulent fluid (3,80%) to frank pus (1,20%). Former were treated conservatively with oral antibiotics and responded favorably while in the last patient, wound was opened and dealt with dressings along with antibiotics. There was no recurrence during one year of the follow up period.



DISCUSSION

In this study we were able to almost replicate the results of contemporary local and international studies. Mean hospital stay was 3 days and the same was reported by Kitchen et al and AkinciOf et al in their studies^{8,9}. 27 patients (90%) were able to resume their routine in 3 weeks time with complete wound healing in almost a month. The same results were produced by KM, Gondal et al. Major complication was wound infection which we encountered in 14% of cases unlike 20% reported by Gondalet al¹⁰. Kitchen et al however reported an impressive 4% rate for wound infection⁸. This difference may be ascribed to the standards of theatre and equipment sterility

Techniques that resulted in flattening of the intergluteal cleft and/or lateralizing of the midline enjoyed much better success rates in terms of recurrence than the traditional procedures like excision with simple primary closure. These procedures resulted in variable but very high recurrence rates ranging from 5% to 42%^{11,12,13}. There has also been an attendant risk of wound dehiscence. Simple wound excision has been a time honored and very safe procedure as far as eradication of the disease process is concerned but lengthy dressings of the wound stretching sometimes over months has been very cumbersome and tedious experience for both patient and the treating physician apart from being highly expensive¹⁴.

Karydakis is one technique that successfully meets these objectives. Karydakis in his original study reported an incidence of 8%¹⁵ while in our study we did not come across any recurrence. The reason behind such ideal results may be short follow up and small sample size.

CONCLUSION

Karydakis is an effective procedure in addressing the main issues that may result in persistence of the pilonidal sinus i.e. deep intergluteal cleft and midline scars. By making natal cleft shallow and lateralizing the scar, karydakis technique, for large part has the ability to rid the patient of this nasty disease once and for all.

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