Pilonidal sinus disease our experience; New vision

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introduction

* Despite of the current advances in the field of medical research, the best approach in managing Pilonidal sinus disease is not yet well defined.
* However, the treatment regimen should ideally minimize pain, allow short hospitalization time, reduce complications and rate of recurrence & should provide rapid recovery and return to normal daily activities [***Karaca et al, 2013***].

There are several surgical procedures described for the treatment of pilonidal sinus disease including incision and drainage, excision and healing by secondary intention, which is currently the most commonly used procedure [***Miller & Harding 2003***/ ***Lee et al, 2000***], excision and primary closure & excision with reconstructive flap techniques [***Muller et al, 2011***].

Aim of the work

* To evaluate our method of PNS excision as regard the technique and complications.

Patients and Methods

* One hundred patients (93 males and 7 females) suffering from uncomplicated pilonidal sinus disease with an age range of 18 to 50 years were enrolled in this study.

* This technique is based on;
  - ✓ probing and lay open the main PNS track and all side tracks, followed by proper curettage to the whole raw area during which any pouting of granulation tissue (represents an opening to side track) was subsequently probed and lay opened.

Patients and Method

- ✓ Full excision of the PNS making sure that there is no more unhealthy granulation tissue left in the surgical bed.
- ✓ Creating bilateral fibrofatty flaps over the gluteus muscle not exceeding 2 cm in width to avoid flap ischemia.
- ✓ Closure of the flaps on both sides together with the central fascia over the sacrum using Vicryl zero interrupted stitches.
- ✓ Finally, 2 or 3 stitches were taken to approximate the superficial subcutaneous fat, while the skin was left opened.

1. Probing of the sinus

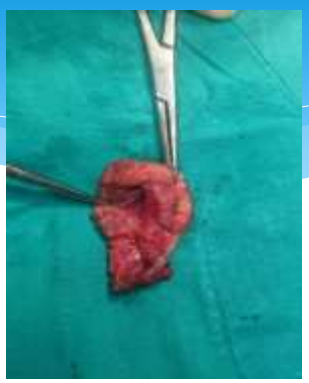
2. Probing and lay-open

3. Curetting the sinus

4. Marking for sinus excision

5. Excision of the opened PNS

6. Completing excision of the track of the PNS



Removed whole PNS

View after excision of the sinus disease

7. Creation of the fibrofatty flaps

8. Closure of the fibrofatty flaps

9. Closure of the subcutaneous fat

After closure of the flap

View after closure SC fat without skin closure

view after complete healing

Results

Gender	Male	93	93%
	Female	7	7%
Age	Range	18 Y	50 Y
	Mean ± SD	37.6	11.6
Duration of intervention	Range	30 min.	60 min.
	Mean ± SD	40	8.9
Recovery time to normal activity	Range	10 days	14 days
	Mean ± SD	12	1.4
Complete wound healing	Range	18 days	27 days
	Mean ± SD	23	3.3

Table 1: Shows demographic, preoperative and operative data of the patients

Results

Postoperative complications

* Fifteen cases (15%) with minor wound infection.
* Five cases (5%) with wound dehiscence.
* Three cases (3%) with recurrence.

Results

Patient with limited wound dehiscence 10 days PO

Discussion

* In this study, recurrence occurred in only three cases (3%). This low rate of recurrence may be due to allowing wound healing without any tension via minimizing the dead space and creating fibrofatty flaps on both sides, leaving the skin opened which led to less incidence of deep space seroma collection.
* This rate of recurrence is much lower than rates of recurrence associated with excision closure techniques and nearly similar to the rate of recurrence associated with open excision technique.

* This was also supported by results of other studies [***Al-Jabri 2001/ Chiedozi et al, 2002***], in which the recurrence rate after wide open excision was 0.6% and 5%, while in cases of wound closure after excision, it was 3.5% and 42%, respectively.
* In this study, non of our patients had postoperative seroma or hematoma. Moreover we don't use drains as closure of the deep spaces interruptedly and without skin closure makes inserting a drain of no use.

Conclusion

* We believe that, our technique has combined benefits of wound closure procedures such as, fast wound healing , short hospital stay and proper cosmetic results with benefits of open wound excision such as, less postoperative complications and low recurrence rate.

From our view of experience, this technique possesses all the criteria for ideal pilonidal sinus excision surgery.

THANK YOU