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CLINICAL STUDY

A single-surgeon, single-institute experience of 59 sinotomies for sacrococcygeal pilonidal disease under local anesthesia

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Abstract: *Background:* The sacrococcygeal pilonidal disease affects relatively young people, causing much nuisance and many lost working days. The ideal treatment should be simple, allowing a speedy recovery with short hospitalization while affording a permanent cure. Currently, many treatment options are available; unfortunately, none of them is ideal and each has its own recurrence rate. In this study, we wanted to emphasize the effectiveness of sinotomy in sacrococcygeal pilonidal sinus disease by single-surgeon's experience.
Methods: Single-surgeon's experience of 59 pilonidal sinus patients was reviewed at single-institute between July 2005 and December 2006. 2 % Prilocaine was injected for local anesthesia and sinotomy technique was performed. All patients were discharged at postoperative second hour and were followed up for a minimum 1 year.
Results: Median age of the 59 patients was 24 (14–56) years. Forty-six (77.96 %) of them were male and 13 (22.03 %) of them were female. Healing completed in 1 month and almost all the patients were able to return to work the following day. We proudly have no recurrence at our mean follow up time of 16 months (range: 12–24 months). Our complication rate was 1.69 %.
Conclusion: Sinotomy has the advantages of simplicity, the possibility to operate under local anesthesia with excellent recurrence rate of 0 % *(Ref. 9)*. Full Text (Free, PDF) *www.bmj.sk.*
Key words: pilonidal sinus, sinotomy, local anesthesia.

Pilonidal disease is an acquired condition with a chronic infection that contains hair and is usually found between the buttocks. Herbert Mayo described a hair-containing sinus in 1833 (1,) but the term pilonidal sinus was coined by Hodge in 1880 (2). The disease affects relatively young people, causing much nuisance and many lost working days. The ideal treatment of this entity should be simple, allowing a speedy recovery with short hospitalization while affording a permanent cure. Currently, many treatment options are available; unfortunately, none of them is ideal and each has its own recurrence rate.

In this study, we wanted to emphasize the effectiveness of sinotomy in sacrococcygeal pilonidal sinus disease by single-surgeon's experience.

Material and methods

Single-surgeon's experience of fifty-nine sacrococcygeal pilonidal disease patients was reviewed at single-institute between July 2005 and December 2006. Informed consent was obtained from every patient. The patients who rejected local anesthesia, who were operated by another technique and who did not complete minimum control time of 1 year were excluded.

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Before surgery, intravenous (i.v.) 1 g ampicilline-sulbactam was prescribed as prophylaxis. 2 % Prilocaine was injected at a maximal dosage of 1 cc/kg for local anesthesia and sinotomy technique was performed. Patients were discharged at postoperative second hour. A non-steroidal anti-inflammatory drug and 500 mg ciprofloxacin was prescribed as a treatment for 5 days. After discharge, careful wound dressing, either in the local dispensary or the hospital outpatient department, was continued. All the patients were controlled every week at postoperative first two months and three months period until the end of first year.

The technique of sinotomy followed the following steps: the main orifice was identified, by probing the main track and laying it open on the probe. Side tracks were similarly laid open, thus creating one single cavity without ramifications. Any cyst wall was dissected out and hair tufts removed. The cavity was then curetted to remove infected granulations and debris, followed by washing with saline. Hemostasis and light packing concluded the operation.

Data were analyzed with the SPSS 11.5 package program. Descriptive statistics were shown as percentile.

Results

Median age of the 59 patients was 24 (14–56) years. Forty-six (77.96 %) of them were male and 13 (22.03 %) of them were female. Healing completed in 1 month and almost all the patients were able to return to work the following day. We have no recurrence at our mean follow up time of 16 months (range: 12–24 months).

Our complication rate was 1.69 %. It was a female patient, with a body mass index (BMI) over 35. Abscess formation was seen at the postoperative second week. It was healed by drainage and antimicrobial therapy.

Discussion

Pilonidal disease has been described more than 170 years ago; yet its exact etiology remains largely speculative. It has been attributed to the drilling effect of loose hairs collecting and penetrating the skin of the natal cleft, which is rendered soft by sweat and sebaceous maceration (3, 4).

Because most recurrences occur in the intergluteal sulcus, methods that flatten the intergluteal sulcus would eradicate the etiology and eliminate the risk of recurrence (5). Also, tension-free reconstructions using flaps have been reported to be of economic advantage because they decreased pain, infections, and recurrence rates (6, 7). Rabie et al found4, in their study in which they compare sinotomy to excisional surgery, the lowest recurrence rate was in sinotomy (12.5 %) and rhomboid flap procedure (0 %). However, they reported that the maximum hospital stay was seen with rhomboid flap technique because of the onset of complications.

Rabie et al found the recurrence rate of sinotomy of 12.5 % at a mean duration of 36.8 months follow up (4). Also, Al Naami reported his experience with the sinotomy technique (8). The procedure was carried out under local anesthesia on an outpatient basis, with a complication rate of 3 % and a recurrence rate of 2 %. Healing was complete in 1 month in 90 % of the patients and in 2 months in the remaining 10 % patients and almost all the patients were able to return to work the following day. Our recurrence rate is 0 %.

Balik et al found that sacrococcygeal fat thickness, as a local factor, is closely associated with pilonidal disease9. We did not study the BMI of our patients. One female who seemed to have the highest BMI, had a postoperative complication of an abscess at operation site. She was treated with drainage and antibacterial-therapy.

We did not come cross any study about any technique for sacrococcygeal pilonidal disease which has a shorter postoperative hospital stay then ours. We have the shortest hospital stay of 2 hours at the literature with the lowest recurrence rate of 0 %.

As conclusion, sinotomy has the advantages of simplicity, the possibility to operate under local anesthesia with recurrence rate of 0 %.

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