Excision And Primary Closure Modality In Treating A Pilonidal Sinus Disease. A personal audit

Muayad A. Al. Khafaji FRCS, FACS
Al. Diwaniya Teaching Hospital.

Abstract:

1) Background: Several options exists with regard to pilonidal sinus disease treatment. I audited the use of excision and primary closure modality over a three years period.

2) Objectives: Is to describe my experience with excision and primary closure modality in treating a pilonidal sinus disease.

3) Methods: Thirty patients with the disease were treated by this method. The sinuses were excised by elliptical incision followed by closure of the wound in two layers. The procedure was facilitated by the use of diathermy.

4) Results: All the cases were treated as a day case procedure. There were (6) complication (20%) with single recurrence (3%). The mean follow up period was nine months.

Conclusion:

I have found the excision and primary closure modality to be a satisfactory mean of treating a pilonidal sinus, and is a preferable from a financial point of view.

Introduction:

Pilonidal sinus disease is a common disorder of the sacroccygeal region. It comprises a variety of problems, including infection /abscess and the development of a chronic sinus cavity. Both congenital and acquired causes have been postulated. (1)

The most important factor in achieving a successful outcome is adequate excision of the sinus. Despite surgical therapy dating back more than one century, management
remains controversial and recent reports have advocated different approaches.\textsuperscript{(2)} Conservative non-operative management, lying open of the track, wide excision and open drainage, wide excision and primary closure, limited excision, and excision with transposition flap are the methods currently used.\textsuperscript{(3)} The aim of this study was to describe my experience with excision and primary closure modality.

Patients and Methods:
I undertook an audit of case records from 30 patients with uncomplicated pilonidal sinus disease who were treated by excision and primary closure modality from Jan. 2002 to Dec. 2004. All the procedures were done by the same surgeon. An informed consent was obtained from all the patients. The procedure was performed under general anesthesia with antibiotic prophylaxis of one gm ceftriaxone given intravenously on induction of anesthesia followed by two successive doses in the next (48) hs. postoperatively. Patients were placed in the prone position and the operative field was shaved and prepared. An elliptical incision was made in the natal cleft, excising the skin and subcutaneous tissue including the sinus and its extension reaching to sacral periosteum. The dissection was facilitated and good haemostasis was achieved by the use of diathermy. This was followed by primary closure of the wound in two layers. Postoperative analgesia in form of non steroidal anti inflammatory drugs were used in most of the cases and was continued for up to 72 hs. postoperatively in some complicated cases. The operation has been performed as a day case procedure in all the cases and the patients were followed up subsequently for up to one year postoperatively.

Results:
All the patients were young male with a mean age of 25 years. (range 14 – 30). The mean time for removal of stitches was 14 days (range 14 – 16). The median time to return to work was 15 days range (14 – 30). There were six complications 20%, one of these was superficial wound infection that was treated conservatively. Another patient had consulted me two days after the operation complaining from severe pain in the area attributed to presence of haematoma which was expressed in the outpatient clinic by removing some of the sutures, and resuturing the wound under local anesthesia. This then healed primarily after two weeks removal of stitches. Another three patients had partial wound dehiscence immediately following removal of the sutures, with a low output of serosangineous fluid discharge due to presence of seroma. This was treated conservatively with complete healing by second intension two weeks later. The mean follow-up of the patients was nine months range (5 – 12). There was only one recurrent sinus in the first six months of the follow – up which represents an overall recurrence rate of about 3% during the study period.

Discussion:
Patients including in this study were young and all of them were male, this is in agreement with the world wide distribution of the disease.\textsuperscript{(4)}
The procedure necessitated a short time to heal which was comparable to different studies in the literature.\(^{(5-7)}\)

In this study the wound complication rate was 20\% which was some what higher than in other series that have a wound complication rate of 0 – 12.5\% and, the rate of recurrence was about 3\% which is therefore comparable to the results seen in the literature.\(^{(8-14)}\)

The only recurrent case was obese individual and this demonstrate the effect of obesity on wound healing and the creation of a deep wound in the natal cleft.\(^{(15)}\)

A recognized complication in this study was the development of seroma or haematoma which may predispose to partial or complete wound dehiscence and, this encourage me to advocate the use of suction drains to minimize this complication.\(^{(16)}\)

I routinely used prophylactic antibiotic in this methods although there is no convincing evidence to strengthen this procedure. All the cases were treated as a day case surgery without an overnight admission and, this explains to some extent the cost effectiveness of the modality.\(^{(17)}\)

Hair removal around the edges is mandatory and has to be continued preferably on along term bases.\(^{(18-21)}\)

However it is important to describe with the patient that this modality can result in a second interference in few cases, I recommend that it is cost effective both to the community and the patient in terms of short hospital stay, postoperative visits and time off work, further more the acceptable rate of complication especially if minimized by the use of drains and the low rate of recurrence should encourage researches to pursue this study.

References: