

Management of sacrococcygeal pilonidal disease

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ABSTRACT

Objectives: Many techniques have been described for the treatment of patients with sacrococcygeal pilonidal disease. No data exists, in relation to this disease within the Kingdom of Saudi Arabia. The aim of this paper is to evaluate our technique retrospectively for management of pilonidal disease with regard to cure and recurrence rates.

Methods: All patients treated at King Faisal Specialist Hospital with either pilonidal abscess or sinus between 1990 and 1998 were identified from the colorectal database and details concerning their presentation, surgery and follow-up were obtained from the patients charts. Both patients with pilonidal sinus and abscess were managed by laying open. Patients were followed until their wounds had healed.

Results: Ninety-eight patients, 12 females and 86 males were treated for pilonidal disease in an 8-year period. All patients were managed by laying open. Thirty-one had had previous surgery. Seventy-one presented with pilonidal sinus and 27 presented with pilonidal abscess. The mean length of history prior to presentation was 25

months. Thirty-one patients had an average of 1.6 operations prior to surgery at King Faisal Specialist Hospital. The mean hospital stay was 5.4 days. The average time for healing following laying open was 2.4 months. Five patients developed recurrence following surgery at King Faisal Specialist Hospital 6%. Of the 67 patients who had their primary surgery at King Faisal Specialist Hospital, 2 patients developed recurrence 3%. The mean period of follow up was 6 months range (3-50 months).

Conclusion: "Laying open" should be the treatment of choice for patients with sacrococcygeal pilonidal disease irrespective of whether the patient presents acutely or electively. Cure rates are high and recurrence rates are low. There is no longer any place for the 2 stage management of pilonidal abscess.

Keywords: Primary pilonidal sinus, primary pilonidal abscess, recurrent pilonidal disease.

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The original description of pilonidal disease was written more than a century ago. Controversy persists regarding the etiology of the condition and its optimal treatment.¹ Although pilonidal disease of the natal cleft occurs with low frequency, it is a serious problem for the patient who is usually young and active. Complications are common and may occur either spontaneously or as a result of surgical treatment.² Pilonidal diseases' reputation for recurrence after treatment has led to the development of a large number of operations with multiple

modifications which may range from simple hair removal to radical excision.³ The great variety of techniques described in the literature suggest that no single method of treatment is universally applicable in the management of the disease.³ The true incidence of pilonidal disease in the Kingdom of Saudi Arabia is unknown and it has not been possible to locate any study of pilonidal disease in Saudi patients. Patients seen with this condition at the King Faisal Specialist Hospital (KFSH) provide a unique insight into the disease and its management in

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the Kingdom of Saudi Arabia due to 2 distinct populations of patients seen at the hospital. Because of the hospital's tertiary nature, patients are referred with recurrent disease following failed surgery at other hospitals. In addition, hospital employees, their dependants and very important persons (VIPs) with primary disease are seen. Since 1990, all patients who presented with either pilonidal abscess or pilonidal sinus have been managed in the same manner, as have patients with recurrent disease, and these patients form the basis of this report.

Methods. A colorectal database has been maintained at KFSH since 1990. The database was searched for patients managed at KFSH with either pilonidal sinus or pilonidal abscess. A retrospective analysis of the charts of the patients identified, was undertaken. All patients with pilonidal disease were managed in the same way.⁴ Both sinuses and abscesses were "laid open" under general anesthesia in the left lateral position. The buttocks were strapped apart and the sinus or abscess was probed to outline the tract. All tracts were opened, acutely angled skin edges between tracts were trimmed, but otherwise no tissue was excised. All granulation tissue and hairs were removed and the base of the sinus was abraded with gauze. Bleeding was controlled with diathermy and the wound was packed with Iodoform gauze soaked in mineral oil. The pack was removed on the 2nd postoperative day and patients were discharged from hospital when they felt that packing was tolerable without analgesia.⁴ Patient's wounds were dressed daily with saline soaked packs until healing was complete. Patients were advised to apply depilatory cream for 6 months following complete healing. Patients were reviewed after healing and then discharged from further follow-up. Patients were instructed to return to the colorectal clinic if their symptoms recurred.

Results. Between March 1990 and February 1998 98 patients, 12 females (average age 24 years) and 86 males (average age 26 years) were treated for pilonidal disease at KFSH. All patients were managed by lay open. Thirty-one patients 32% had had previous surgery at another hospital. There were 71 patients who presented electively to KFSH with pilonidal sinus and 27 patients who presented acutely with pilonidal abscess. The mean length of history prior to presentation at KFSH was 25 months. Thirty-one patients had an average of 1.6 (range 1-5) previous operations for pilonidal disease, a mean of 2.8 years, prior to surgery at KFSH. Three of these patients had been laid open, 13 drained, 8 excised and primarily sutured and 7 were unsure of their previous surgery. Three of these patients developed recurrence following their lay open at KFSH. Fourteen recurrent patients presented to KFSH with pilonidal abscess (13 previously drained, one excised

and sutured), and 17 presented with a further pilonidal sinus following previous surgery (7 excised and sutured, 3 laid open, 7 unknown). Twenty-five patients were 'VIP's and 6 (24%) of these patients had had previous surgery. Three of these patients were lost to follow-up and one recurred (4%). Of the remaining 73 patients, 25 had had previous surgery (34%), 6 were lost to follow-up and 4 recurred (6%). The mean hospital stay was 5.4 days (1-18 days). The mean time to healing following laying open was 2.4 months. Overall 5 patients developed recurrence following surgery at KFSH (6%), but of the 67 patients who had their primary surgery at KFSH 2 patients developed recurrence (3%). One patient developed his recurrence after 4 years, the other 4 patients all recurred within 6 months of their surgery at KFSH. Regular attendance for daily dressing was poor in all patients whose disease recurred. The mean period of follow up was 6 months (3-50 months).

Discussion. Mayo reported the first case of pilonidal disease in 1833.⁵ In 1847, in an article "Hair Extracted From an Ulcer" Anderson⁶ first described the management of the condition. Hodges in 1880⁷ used the term pilonidal disease which is still the preferred name in use today. The term pilonidal means a "nest of hair." Since these early papers, many articles have been published and many procedures have been advocated but unfortunately no one method has been found to be best.¹ The described treatments range from the simple injection of phenol and hair removal to extensive plastic reconstruction with variously shaped 'flaps'.⁸ Each method of treatment has its advocates but it seems that the lowest recurrence rates (4%-6%) follow laying open and marsupialization.^{9,10} Preoperative positioning of patients in the left lateral position was "easy" on operating room personnel as they do not have to lift these often overweight patients into the prone jack-knife position. The maintenance of the patients airway, a problem in these patients, is much easier in the former position. Day care facilities did not exist in our hospital at the time of this study, and our patients were reluctant to have the procedure performed under local anesthesia. The technique of "laying open" described in this study was simple, quick and required no post operative care at all other than daily bathing, and the insertion of a clean dressing to protect the clothing and keep the wound from healing prematurely. The wound itself did not require protection. Since the wounds were left open they drained freely and never became infected unless premature healing took place. The skin around the wound needed to be shaved on a weekly basis to facilitate strong healing.¹¹ Most recurrences in both this and other series^{9,10} have been found to occur within a short time of surgery. Not surprisingly patients who developed recurrence were poorly

compliant with respect to daily dressing. Although our patients were not followed for longer than an average of 6 months after healing had taken place, it was expected that those who developed recurrence following their discharge from the KFSH would return due to their need to continue their management at a tertiary hospital. Longer clinic follow-up was therefore not considered to be necessary. It is possible, but highly unlikely, since all patients operated upon at KFSH developed their recurrences within 6 months of surgery, that some of our patients could have developed recurrent disease after this time and some might then have attended another hospital for further treatment. Had this happened it would have introduced a small favorable bias.⁹ Follow-up in other series^{9,10} has varied from 3 months to 20 years. It is suggested that "laying open" should be the primary treatment of choice for patients with sacrococcygeal pilonidal disease (both abscess and sinus) irrespective of whether the patient presents acutely or electively. Cure rates are high 87%-96% and recurrence rates are low (4%-13%) in comparison with other techniques, for example excision and primary suture 8%-25%.^{9,10} The operation can be undertaken in a day care setting.¹² Plastic procedures¹⁰ should be reserved for patients who develop recurrence following adequate 'laying open'. We feel that there is no place in modern sacrococcygeal pilonidal surgery for the 2 stage

(incise then definitive surgery) management of pilonidal abscess¹⁰ and a plea is therefore made for single stage definitive surgery in all patients.

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