

Summary and Conclusions

Pilonidal sinus is a chronic inflammatory condition that consists of a midline pit sited at the lower end of the back between the buttocks and is almost always associated with a hair tuft. It is often associated with lateral secondary tracks, which usually cephalad and away from the midline pit but occasionally, the secondary track may emerge in a caudal direction (Weston, Schalchter 1963, Wilson, Failes 1971). The pilonidal sinus was first described by Hodges (1889) following the Latin word “pilus” hair and “nidus” nest (i.e. a nest of hair) (Rainsbury, Southam 1982). The disease usually affects adolescent or young adults with males being more frequently affected than females, especially hirsute individual and obese patients. This disease rarely presents after the age of 40 years (Clothier, Haywood, 1984).

Chronic pilonidal sinus disease remains a common, recurring problem with a high cost to the population in terms of days of hospitalization, discomfort as an outpatient. However, proper understanding of its etiology could simplify approach to this curious lesion.

According to Bose, Candy et al., (1970), the predisposing factors for the development of a post-anal pilonidal sinus are the deep natal cleft and the rolling movement of contiguous surfaces of the buttocks. The deep natal cleft is prone to collection of loose hairs, to sweaty maceration and to minor sepsis which pave the way to hair penetration. This is initiated by the rolling movement and friction which normally take place between contiguous surfaces. (Isbister & Prasad., 1995)

Added that the subsequent course was that of a foreign body granulomatous reaction.

This view, that it is acquired lesion due to penetration of the skin by hairs, simplifies the approach to the disease and suggests that all what is necessary to treat this condition is a conservative approach including removal of the foreign body (hairs) and treatment of the wound in such a way to promote proper healing. Despite this, the surgical treatment of post-anal pilonidal sinus is characterized by a wide diversity of techniques, a fact implying that no single method is completely satisfactory.

The ideal treatment of this disease should provide a chance of cure with a low recurrence rate with the shortest hospital stay, minimal inconvenience, and time off work and should be cost effective (Khaira & Brown 1995). This goes with the same theme of surgery in general , which should minimize both the financial cost to the community (treatment efficiency) and the cost to the patient in terms of time off work, number of dressings and postoperative visits, complications and recurrence (treatment effectiveness) (Kitchen, 1996)

The laying open of the pilonidal sinus has the following advantages: (Al Homoud, et al 2001; da Silva, 2000; Notaras,1970, and Goodall, 1961)

- (1) Short operative time and short period of hospitalization.
- (2) Low recurrence rate.
- (3) Minimal post operative complications.
- (4) Infection is not a contraindication to operation.

However, the operation has the disadvantage of a relatively long time for complete wound healing to occur, (Al Homoud, et al 2001, and Notaras, 1970)

On the other hand, excision and primary closure using different techniques of Cutaneous flaps owing to the following advantages:

- (1) Short hospital stay (Serous, Somekh 2002; Aydede, et al 2001, and Al Jaber, 2001).
- (2) Patients are spared prolonged, sometimes painful dressing sessions and are also spared too long and very tedious convalescence (Aydede, et al 2001; and Chiedozi, et al 2002).

In our study we review the benefits of using cutaneous flaps in the closure of defects after excision of pilonidal sinus.

This study was done to evaluate the benefits of using cutaneous flap technique for the treatment of pilonidal sinus.

This study also compared between other methods of treatment of pilonidal sinus e.g.: laying open technique, excision with primary closure, karydakis technique. It was found that this method of treatment gives a better result in comparison to the previous methods in multiple aspects. We concluded that treatment of pilonidal sinus using different types of cutaneous flaps is an effective method of treatment of primary and recurrent pilonidal sinus.

It could be done on a day surgery basis. It needs special training and the financial cost on the patient and community is reduced in terms of reduced patient disability, rapid bed turn over, minimum dressings and discomfort to the patient and early return to work with minimal inconvenience.

We strongly recommend this technique for the treatment of pilonidal sinus.