

LOS ANGELES

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PILONIDAL DISEASE

Subtle, Not So Subtle and Stubborn

THE BASICS

Pilonidal disease represents several forms of a single abnormality. Pilonidal disease may consist of nothing more than asymptomatic midline skin pits overlying the sacrococcygeal area. At the other extreme, the disease may be a large complex abscess associated with sepsis. In between these extremes are sinuses which occasionally cause discomfort and erythema, or sinuses which periodically drain and then return to an asymptomatic state.

Whether pilonidal disease is a developmental disorder or is acquired during growth is unknown. In the developmental theory, there is a failure of midline fusion, with epidermal rests located deep to the dermis. These epidermal rests can mature, grow and lead to symptoms. In the acquired scenario, after the onset of puberty, sex hormones act on the pilosebaceous glands causing the hair follicles to become distended with keratin. As a result, a folliculitis is created which produces edema and follicle occlusion. The infected follicle ruptures and extends into the subcutaneous tissue. This results in a sinus tract that leads to a deep subcutaneous cavity. By friction or movement of the buttocks with standing or sitting, the distal ends

of loose hair from around the perineum may enter these sinuses. The sinuses can then become infected by skin organisms and begin to suppurate, leading to an abscess. Staphylococci and streptococci are the most common organisms found in the culture of infected abscesses.

The incidence of pilonidal disease is approximately 0.7% in the general population. The condition most commonly affects post-pubertal young adults with males affected two to four times more frequently than females. The onset of the disease occurs earlier in women, which may be due to an earlier onset of puberty.

Other factors affecting the incidence are: increased sweating associated with

sitting and buttock friction, poor personal hygiene, obesity, and local trauma. Interestingly, barbers and animal groomers have a higher incidence of the disease than other occupations.

The location of the disease process is the easiest way to confirm the diagnosis. There are few disease entities which present in the skin of the sacrococcygeal region. Oftentimes, small asymptomatic midline openings or pits are seen in the base of the natal cleft during a routine

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Pilonidal Anatomy.

"...tenacity and perseverance are often required in treating this potentially stubborn affliction."

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office exam. Patients are frequently unaware of this finding.

Pilonidal disease, fistula-in-ano, and hidradenitis suppurativa may present similarly. Also included in the differential diagnosis are skin furuncle, syphilitic granuloma, tubercular granuloma, and osteomyelitis of the underlying sacrum with a draining sinus. However, these are extremely rare.

WHEN TO OPERATE

In its simplest form, pilonidal disease is asymptomatic and no therapy needs to be instituted. It may remain permanently asymptomatic.

Fifty per cent of patients present with early signs of local disease. Pain, erythema and induration may be the only presenting symptoms. Treatment with broad spectrum antibiotics such as cephalexin, 500 mg, by mouth four times daily for up to two weeks may control and reverse the process. Patients should be reevaluated early, so as to prevent disease progression through early operative intervention.

Should a frank abscess with fluctuance be found, a simple incision and drainage may suffice and relieve symptoms. At this point, the process should resolve and pain should abate. However, this remedy is not curative and thought must be given to definitive treatment once the inflammatory process has resolved. This is not to imply that elective treatment must be undertaken. Many patients will not experience a second abscess. In fact, active disease is rare after the age of forty, and consideration should be given to watchful waiting to see if the disease process spontaneously abates.

With recurrent disease or in cases of disease progression, most patients request elective, and hopefully definitive treatment. Patients must be advised that pilonidal disease is a stubborn problem and prone to recurrences, even after treatment by the most experienced surgeons. With slow healing or with non-healing, the treatment may cause more morbidity than the underlying disease. Non-healing wounds may continue to discharge for months or years, at great emotional and physical cost to the patient. Operative therapy is not to be undertaken lightly and patients should be informed of possible future morbidity.

OPERATIVE OPTIONS

In its most simple form, operative treatment involves removing hair from the midline pits, constant shaving of the natal area and close attention to personal hygiene. This should be thought of as control rather than cure.

Under anesthesia, the pits may be opened, and the bases of the sinuses curetted, removing granulation tissue and infected debris. The skin is usually left open in the hope that healing will eventually be complete.

Trephination is a newer variation of treatment. The tract is simply removed using a trephine and the resulting defect is allowed to heal. The advantage is that if successful, this technique is less invasive.

Finally, excisional therapy may be needed. In concept, this is straightforward, but excisional therapy may also be associated with a lack of adequate healing or with multiple recurrences in an area that seemingly had been completely excised.

Traditionally, using a midline approach, a wide excision of the pilonidal area is performed. This encompasses the skin and sub-

cutaneous tissue down to the presacral fascia. If the affected area is generally clean or chronically scarred, the defect may be closed primarily. Care must be taken to leave as little dead space as possible in order to prevent a fluid collection with a superimposed infection and subsequent wound breakdown.

If there are signs of active inflammation, the resulting defect may be left open to heal. Healing may be a slow process. Both aerobic and anaerobic organisms are found in fifty to seventy per cent of wounds. The disadvantage of leaving the operative site open is the inconvenience to the patient, with frequent dressing changes, and possible premature closure of the skin edges. The average time for wound healing is approximately six weeks.

Due to the high shearing forces at the midline operative site with a possible subsequent wound dehiscence, lateral incisions have been used with the thought that an incision placed in a lateral area of lower tension may heal in a more consistent manner. Popularized by Bascom, the potential advantages include smaller wounds, quicker healing time, usually within three weeks, minimal wound care, earlier return to work and no need for daily scheduled dressing changes.

Rarely, flaps or other plastic techniques may be needed in order to close persistently non-healing operative sites. A rhomboid flap, a Z-plasty or a myocutaneous flap is used to cover the defect. These techniques may be used during a primary closure as well. The potential complications include loss of skin sensation in the flap, which is observed in more than fifty per cent of patients, and necrosis of the flap edges. Primary healing is reportedly achieved in ninety per cent of patients.

A STUBBORN DISEASE

A seemingly simple problem such as pilonidal disease can have far reaching consequences even when treated in an optimal fashion. Treated by an experienced surgeon, a well informed patient will hopefully experience an ideal outcome. However tenacity and perseverance is often required in treating this potentially stubborn affliction.



**Pilonidal Disease.
Proposed Area
of Excision.**