

ENTITLEMENT ELIGIBILITY GUIDELINES

CHRONIC PILONIDAL DISEASE

MPC 01201
ICD-9 685

DEFINITION

Pilonidal Disease is a chronic infection caused by penetration of a foreign body into the subcutaneous tissues. The foreign body is usually hair, but can be other organic material including wool.

Please note: Entitlement should be granted for a chronic condition only. For VAC purposes, “chronic” means that the condition has existed for at least 6 months. Signs and symptoms are generally expected to persist despite medical attention, although they may wax and wane over the 6 month period and thereafter.

DIAGNOSTIC STANDARD

Diagnosis by a qualified medical practitioner is required.

ANATOMY AND PHYSIOLOGY

The pathogenesis of pilonidal disease has been debated actively over the years, with current thinking favoring an acquired pathology as opposed to a congenital anomaly:

(1) Congenital theory

Subcutaneous tissue from the sacrum and coccyx of children up to the age of four years at post-mortem was examined by Chamberlain and Vawter (1974). Each sinus communicated with the skin, but no hair follicles or epidermal appendages were seen. It was suggested that the sinus was congenital in origin, but that the disease develops as a result of secondary factors, such as obesity, hirsutism, and endocrine changes.

(2) Acquired theory

There is growing evidence that tiny midline holes or pits, sometimes called sinuses, which are seen in the cleft of almost all persons with the disease, are the source of the disease. It is postulated that the pits represent distorted hair follicles.

Sinuses are lined by granulation tissue, and often lead to a cavity filled with granulation tissue and hair. If a sinus closes temporarily, a pilonidal cyst remains in the deeper tissues. Acute exacerbation of the chronic infection produces a pilonidal abscess.

While pilonidal disease most commonly occurs in the region of the sacrococcygeal junction, it has been reported in the umbilicus, the axilla, clitoris, interdigital webs of barbers' hands, the interdigital web of a worker's foot in a hair mattress factory, the sole of the foot, and the anal canal.

Sedentary occupations and constant mild trauma to the sacral area, as in driving a truck, are contributory factors. The condition, also known as "*jeep disease*", was found commonly among jeep drivers during World War II. It was hypothesized that sitting in vehicles with little shock absorption for long periods drove hair ends into follicles and skin adnexal glands, initiating a foreign-body reaction, with the resulting abscess rupturing spontaneously and leaving a painful discharging sinus.

Most affected persons are young, hirsute males, who may be significantly overweight.

CLINICAL FEATURES

Clinical presentation may be classified into the following 3 categories:

1. Acute pilonidal abscess - Those suffering from this condition present typically with moderate to severe pain and swelling in the region of the sacrum or sacrococcygeal junction. Acute infection is usually the first manifestation, which may improve and not recur.
2. Chronic Pilonidal Sinus - This is the commonest clinical presentation. Persons usually present to a physician with a painful discharging site at the base of the spine. On examination the sinus opening can be identified in the midline within the natal cleft with a palpable cephalad-tracking sinus. There may be multiple sinus openings.
3. Complex or recurrent pilonidal disease - This results from re-infection within neighboring hair follicles, or from hair entering the wound during healing.

PENSION CONSIDERATIONS**A. CAUSES AND/OR AGGRAVATION**

THE TIMELINES CITED BELOW ARE NOT BINDING. EACH CASE SHOULD BE ADJUDICATED ON THE EVIDENCE PROVIDED AND ITS OWN MERITS.

1. Congenital pilonidal sinus

This school of thought considers that while the pilonidal sinus is congenital, the disease develops as a result of secondary factors such as obesity and hirsutism.

2. Constant friction to the sacral skin prior to clinical onset or aggravation

Constant friction means friction to the sacral skin, from a jeep or similar vehicle seat, which takes place on a regular basis over a period of 3 months or more.

For constant friction to cause or aggravate Pilonidal Disease, signs/symptoms of Pilonidal Disease should occur during exposure to constant friction or within approximately 2 weeks of cessation of the exposure.

3. Obesity prior to aggravation

For VAC purposes, obesity is a body mass index (BMI) of 30 or greater. The BMI table is contained in the Gastrointestinal Chapter of the Table of Disabilities.

$$\text{BMI} = \frac{\text{weight in kgs}}{\text{height in metres squared}}$$

Obesity is defined as an increase in body weight by way of fat accumulation. The definition excludes weight gain resulting from:

- edema
- peritoneal or pleural effusion
- muscle hypertrophy

The relevancy of this factor is based on friction in the gluteal region, as demonstrated by a study of army personnel whose body weight rose on average by 3.2 kg over an 11 year period.

4. Exposure to occupations giving rise to hair insertion interdigitally prior to clinical onset or aggravation

For exposure to occupations giving rise to hair insertion interdigitally to cause or aggravate Pilonidal Disease, signs/symptoms of Pilonidal Disease should occur during the exposure or within approximately 2 weeks of cessation of the exposure.

Occupations which may allow the introduction of hair and/or wool into the interdigital skin include barbers, hairdressers, sheep-shearers and milkers.

5. Wearing a prosthesis prior to clinical onset or aggravation
In the wearing of a prosthesis, the process of hair ends being driven into hair follicles and skin adnexal glands on the stump may initiate a foreign body reaction and result in abscess at the site of the stump.
6. Inability to obtain appropriate clinical management

B. MEDICAL CONDITIONS WHICH ARE TO BE INCLUDED IN ENTITLEMENT/ASSESSMENT

C. COMMON MEDICAL CONDITIONS WHICH MAY RESULT IN WHOLE OR IN PART FROM PILONIDAL SINUS AND/OR ITS TREATMENT

- Squamous cell carcinoma arising from site of pilonidal sinus

REFERENCES FOR CHRONIC PILONIDAL DISEASE

1. Australia. Department of Veterans Affairs: medical research in relation to the Statement of Principles concerning Chronic Pilonidal Sinus, which cites the following as references:
 - 1) Patel, M.R., Bassini, L., Nashad, R. and Anselmo, M.T., (1990) Barber's Interdigital Pilonidal Sinus of the Hand: A Foreign Body Hair Granuloma. *J. of Hand Surgery*, Vol. 15A, No: 4. July, 1990. p652.
 - 2) Karydakis, G.E., (1992) Easy and Successful Treatment of Pilonidal Sinus After Explanation of its Causative Process. *Aust. N.Z. J. Surg.*, Vol. 62. p385-386.
 - 3) Karydakis, G.E., (1973) New Approach to the Problem of Pilonidal Sinus. *The Lancet*. Vol. ii. Dec. 22, 1973. p1414-1415.
 - 4) Kitchen, P.R.B., (1982) Pilonidal Sinus: Excision and Primary Closure With a Lateralised Wound - the Karydakis Operation. *Aust. N.Z. J. Surg.*, Vol. 52. No:3. June, 1982. p302-305.
 - 5) Ellis, H. and Calne, R. (1987) Lecture Notes on General Surgery. 7th Ed. Oxford: Blackwell Scientific Publications. p435-436.
 - 6) Patel, M.R., Bassini, L., Nashad, R. and Anselmo, M.T., (1990) Op cit. p653.
 - 7) Phillips, P.J. (1966) Web Space Sinus in a Shearer. *MJA*. Dec. 10. 1966. Vol. 2: p1152-1153.
 - 8) Woodward, W.W., (1965-1966) A Pilonidal Sinus of the Ear. *Aust. N.Z. J. Surg.* Vol. 35. p72-73.
2. JCN - December 1999. Wound Management. Pilonidal sinus wounds: the clinical approach. Retrieved Apr. 02, 2001, on the World Wide Web.
3. Sabiston, David C. *Textbook of Surgery. The Biological Basis of Modern Surgical Practice*. 13th ed. Toronto: W.B. Saunders, 1986.
4. Schrock, T. R., ed. *Handbook of Surgery*. 8th ed. California: Jones Medical Publications, 1985.
5. Schwartz, Seymour I., et al, eds. *Principles of Surgery*. 5th ed. Montreal: McGraw-Hill, 1989.