

## Case Report

# INTERMAMMARY PILONIDAL SINUS: A CASE REPORT

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## ABSTRACT

Pilonidal cysts and sinuses are described as dermoid cysts containing follicles of hairs and sebaceous glands. They clinically present as pain, local infection and redness.

Pilonidal sinus (PS) is a frequent condition occurring twice as common in men than women. The sinus is a blind tract lined with granulation tissue, which ends in a cavity containing pus. The commonest site is the sacrococcygeal, however it may be also be seen in the axilla, groin, inter-digital web, umbilicus, or even on the foot.

It is most commonly seen in the age group between 15 to 30 years. We present a rare case of pilonidal sinus occurring in the intermammary region in a young girl of 20 years.

**Keywords:** *Intermammary Pilonidal Sinus, Pilonidal Cyst, Pilonidal Disease*

## INTRODUCTION

Pilonidal cysts and sinuses are described as dermoid cysts containing follicles of hairs and sebaceous glands. They clinically present as pain, local infection and redness.

Pilonidal sinus (PS) is a frequent condition occurring twice as common in men than women. The sinus is a blind tract lined with granulation tissue, which ends in a cavity containing pus. The commonest site is the sacrococcygeal, however it may be also be seen in the axilla, groin, inter-digital web, umbilicus, or even on the foot.

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## CASES

A 20 years old female presented with a discharging sinus in the intermammary region since six months. Local examination showed a single discharging sinus with induration. After routine investigations she was posted for surgery under general anesthesia. Complete excision of sinus tract with abscess cavity was done after delineating the tract with methylene blue. Primary closure was done after irrigating the wound with povidone and hydrogen peroxide. Histopathology showed pilonidal sinus tract with acute on chronic inflammation.

## DISCUSSION

In 1880 Hodge coined the term 'pilonidal' from the Latin word pilus meaning hair and nidus meaning nest (Lion-Cachet, 1971). Pilonidal disease is a wide spectrum consisting of asymptomatic hair containing cysts with sinus to large abscess. The etiology of pilonidal sinus has changed from the congenital to the accepted acquired theory (Richardson, 1994; Chintapatla *et al.*, 2003). The high recurrence rate after excision also helps in support of the acquired theory.

Pilonidal sinus is a granulation lined tract which ends in a cystic cavity lined with epithelium. The most commonest site being the sacrococcygeal region but may also be seen in the axilla, groin, inter-digital web, umbilicus, or even on the foot (Al-Jaberi, 2001) and penis (Val-Bernal *et al.*, 1999). The pathogenesis is suggested on the basis that with the onset of puberty there is a rise in the sex hormones that act on the pilosebaceous gland and hair follicle causing it to become distended with keratin. This results in folliculitis causing edema and occlusion of the follicle. The infected follicle ruptures in the subcutaneous tissue forming an abscess, which leads to the formation of the sinus tract. Secondary tracts are formed as the abscess spontaneously drain to the skin surface (Chintapatla *et al.*, 2003).

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Intermammary pilonidal sinus presents as pain with discharging sinus. In the early stages only cellulitis will be present, later on abscess formation results when folliculitis expands in the subcutaneous tissue and burst to form secondary tract openings. In chronic condition the sinus gets converted into an open cavity which keeps discharging fluid (Hull, 2002; Surrel, 1994). The treatment for intermammary pilonidal sinus is wide excision of sinus tract and abscess cavity. Methylene blue should be injected to delineate the tract. Recurrence was less likely to occur when methylene blue was used intra-operatively to delineate tract as small tracts may be missed during excision (Doll *et al.*, 2008). The various surgical options are wide excision with primary closure, wide excision with healing by secondary intention or plastic surgery with use of rotational flap (Ertan *et al.*, 2005). The other techniques like topical polyphenols (Aksoy *et al.*, 2010; Gulpinar *et al.*, 2013) and laser epilation (Abbas *et al.*, 2013; Benedetto and Lewis, 2005) may also be tried. The new technique excision and tension-free primary closure using fibrin glue in order to obliterate the dead space and to promote wound healing has also been described (Greenberg *et al.*, 2004).



**Figure 1: Pilonidal sinus of the intermammary region**



**Figure 2: Pilonidal sinus**



**Figure 3: Excised sinus tract**



**Figure 4: Primary closure after wide excision**

### REFERENCES

- Abbas O, Sidani M, Rubeiz N, Ghosn S and Kibbi AG (2010). Letter :755-nm Alexandrite laser epilation as an adjuvant and primary treatment for Pilonidal sinus disease. *Dermatologic Surgery* **36** 430-2.
- Aksoy HM, Aksoy B and Egemen D (2010). Effectiveness of topical use of natural polyphenols for the treatment of sacrococcygeal Pilonidal sinus disease: A retrospective study including 192 patients. *European Journal of Dermatology* **20** 476-81.
- Al-Jaberi TM (2001). Excision and simple primary closure of chronic pilonidal sinus. *European Journal of Surgery* **167** 133-5.

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**Anthony V Benedetto and Alan T Lewis (2005).** Pilonidal sinus disease treated by depilation using an 800 nm diode laser and review of the literature. *Dermatologic Surgery* **31**(5) 587.

**Chintapatla S, Safarani N and Kumar S (2003).** Sacrococcygeal pilonidal sinus: Historical review, pathological insight and surgical options. *Techniques in Coloproctology* **7** 3-8.

**Dietrich Doll, Alexander Novotny, Ronny Rothe, Jette Elisabeth Kristiansen, Kai Wietelmann, Anne-Laure Boulesteix, Wolfgang Düsel and Sven Petersen (2008).** Methylene Blue halves the long-term recurrence rate in acute pilonidal sinus disease. *International Journal of Colorectal Disease* **23**(2) 181.

**Ertan T, Koc M and Gocmen E (2005).** Does technique alter quality of life after pilonidal sinus surgery? *The American Journal of Surgery* **190** 388-92.

**Greenberg R, Kashtan H, Skornik Y and Werbin N (2004).** Treatment of pilonidal sinus disease using fibrin glue as a sealant. *Techniques in Coloproctology* **8**(2) 95.

**Gulpinar K, Pampal A, Ozis SE and Kuzu MA (2013).** Non operative therapy for pilonidal sinus in adolescence: crystallised phenol. *BMJ Case Reports*.

**Hull TL and Wu J (2002).** Pilonidal disease. *Surgical Clinics of North America* **82** 1169-85.

**Lion-Cachet J (1971).** Inter-mammary pilonidal sinus. *South African Journal of Surgery* 141-2.

**Richardson HC (1994).** Intermammary pilonidal sinus. *The British Journal of Clinical Practice* **48** 221-2.

**Surrel JA (1994).** Pilonidal disease. *Surgical Clinics of North America* **74** 1309-15.

**Val-Bernal JF, Azcarretazabal T and Garijo MF (1999).** Pilonidal sinus of the penis. A report of two cases, one of them associated with actinomycosis. *Journal of Cutaneous Pathology* **26**(3) 155.