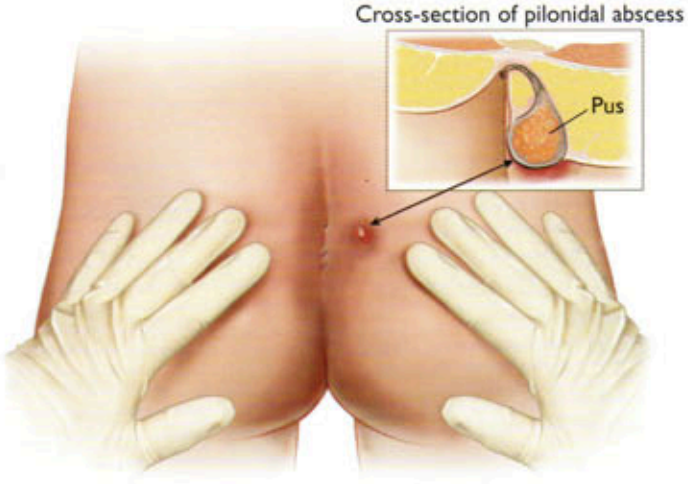
ROYAL AUSTRALASIAN COLLEGE OF SURGEONS

Colorectal Surgical Society of Australasia

SURGICAL TREATMENT OF PILONIDAL DISEASE

A guide for patients

Cross-section of pilonidal abscess



Pilonidal disease is a skin infection in the natal cleft between the base of the spine and the anus. Doctors are uncertain about its exact cause. The consensus view is that pilonidal disease is due to the insertion of hairs into the skin of the natal cleft. That is, hair filaments burrow through an opening in the skin and become fixed in place because they are shaped somewhat like miniature arrows with multiple barbs.

Another view is that pilonidal disease develops after repetitive minor trauma to the area and the gathering of hairs, sweat and debris. For example, this might occur during prolonged sitting in an uncomfortable vehicle. During the Second World War and the Korean War, the condition was called jeep-drivers disease.

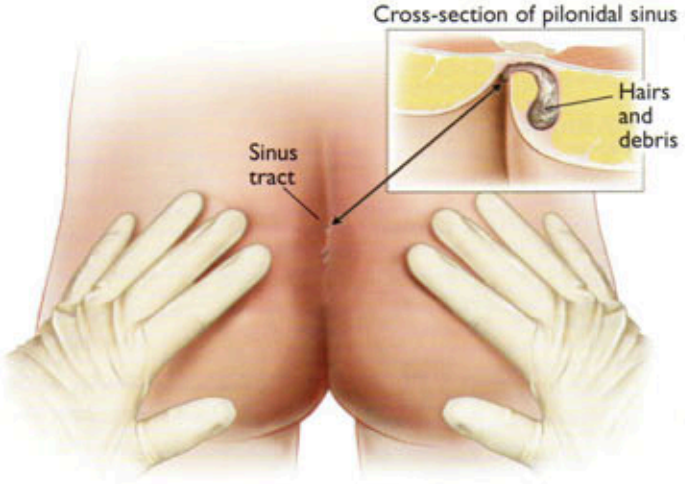
Other factors that may contribute to the risk of developing pilonidal disease include:

- thick, coarse body hair
- obesity
- an inactive lifestyle
- a job that involves long periods of sitting
- a family history of the disease
- gender (the condition is more common in men).

Pilonidal disease affects about 26 people in every 100,000 in developed countries and usually occurs between the teenage years and age 40. There are about 5,000 new cases in Australia and 700 new cases in New Zealand per year.

The symptoms of pilonidal disease vary from a small, tender lump or small pit or hole to a large, painfully infected mass. Clear, cloudy or bloodstained fluid may drain from the area. Prolonged sitting or physical activity may cause the area to become increasingly tender.

Cross-section of pilonidal sinus



THREE COMMON FORMS OF PILONIDAL DISEASE

- Pilonidal abscess – acute infection and collection of pus in a closed cavity containing a tuft of hair. Many patients with pilonidal disease develop an abscess. The area becomes red and painful. The infection may cause fever and nausea.
- Pilonidal sinus – a pus-oozing, infected, small and open cavity containing a tuft of hair. This condition sometimes arises after an abscess has cleared, either by itself, or with medical treatment. One or more small openings (sinus tracts) join the cavity to the skin surface. Some people may develop a troublesome pilonidal sinus although they have never had an abscess.
- Pilonidal cyst – a closed cavity containing hair. These cysts are not acutely infected but may be inflamed, persistent and annoying.

The first line of treatment, for a pilonidal cyst that is not causing any problem, is to "wait and watch". If the area is kept clean and free of hair, the cyst may clear up on its own. If a minor infection develops, antibiotics may be given. If an abscess or boil develops, antibiotics treat the immediate infection, but antibiotic treatment is not a permanent cure. The abscess needs to be cut open (lanced) to drain out the pus.

Surgery is almost always needed when patients have repeated, acute infections. These infections typically cause inflammation of the cavity and sinus tracts, chronic swelling, intense pain and discharge.

Pilonidal disease is not cancer, although some very rare cases have become cancerous after many years of recurrent infection.

Dear Surgeon: When you discuss this pamphlet with your patient, remove this sticker and put it on the patient's medical history or card. This will remind you and the patient that this pamphlet has been provided. Some surgeons ask their patients to sign the sticker to confirm receipt of the pamphlet.

TREATMENT INFORMATION PAMPHLET

PROCEDURE:.....

PATIENT'S NAME:.....

DOCTOR'S NAME:.....

EDITION NUMBER:.....DATE: (day).....(month).....(year).....

Edition number: 1

Talk to your Surgeon

The aim of this pamphlet is to provide you with general information about pilonidal disease and surgery. It is not a substitute for advice from your surgeon. Read this entire pamphlet carefully. Some technical terms may require further explanation by your surgeon. Write down questions you want to ask, and discuss them with your surgeon.

While the risk of a major complication is low, complications are possible (see page four).

Although patients should be as informed as possible about the surgical treatment, every aspect cannot be covered in this pamphlet. Every case is different, and for this reason, patients are advised to seek a full explanation from their surgeon. Discuss all aspects of your surgery, including:

- the diagnosis
- whether all non-surgical treatment options have been considered
- the chances of success and failure, and
- risks, complications and limitations of surgery.

Your surgeon cannot guarantee that surgery will meet all your expectations or that surgery has no risk. If you are uncertain, you are encouraged to seek the opinion of another specialist. This pamphlet should only be used in consultation with your surgeon.

Consent form: If you decide to have treatment, your surgeon will ask you to sign a consent form. Read it carefully. If you have any questions, ask your surgeon.

Interpreter Service

If you have trouble reading English, telephone the translating and interpreting service.
Australia: Translating and Interpreting Service (T.I.S.) 13 14 50 (national number).
New Zealand: Interpreting and Translation Services 09 276 0014 (Auckland).

ARABIC إذا وجدتم صعوبة في قراءة الإنجليزية اتصلوا بخدمة الترجمة الخطية والشفوية على الرقم 13 14 50 في استراليا و 09 276 0014 في نيوزيلاندا

CHINESE 如果您閱讀英語有困難，請致電口筆譯服務處。澳大利亞： 13 14 50 新西蘭： 09 276 0014

GREEK Αν δυσκολεύεστε να διαβάσετε αγγλικά, τηλεφωνήστε στην υπηρεσία διερμηνέων μεταφραστών. Αυστραλία: 13 14 50 Νέα Ζηλανδία: 09 276 0014

ITALIAN Se avete difficoltà nel leggere in inglese, telefonate al servizio interpreti e traduttori. Australia:13 14 50 Nuova Zelanda: 09 276 0014

MAORI Mehe rarureru ana koe ki te riiti i nga korero-pukapuka i roto i te reo Paakeha, me waea atu koe ki te tari kai whakamaori i nga kupu korero pukapuka me te reo, Te naama hei waea - tangaatu mou i Ahitreiria (Australia) ko: 13 14 50. Te naama waea i Aotearoa (New Zealand) ko: 09 276 0014.

SAMOAN Afai e faaletonu lau faitau i le Gagana Peretania, telefoni le tautua faaliliu ma faamatala upu. Ausetalia 13 14 50 Niu Sila 09 276 0014

TONGAN Kapau 'oku 'ikai ke mahino ho'o lau he lea fakapapalangi, telefoni ki he kautaha liliulea mo fakatonulea. 'Aositelelia: 13 14 50 Nu'usila: 09 276 0014

TURKISH İngilizce okumakta zorluk çekiyorsanız, tercümanlık servisini arayınız. Avustralya: 13 14 50 Yeni Zelanda: 09 276 0014

VIETNAMESE Nếu quý vị gặp khó khăn khi đọc tiếng Anh, điện thoại cho dịch vụ thông ngôn và phiên dịch. Tại Úc: 13 14 50 tại Tân tây lan: 09 276 0014.

BEFORE SURGERY

After you have had a thorough physical examination, your surgeon can discuss treatment options with you. The surgeon needs to know your medical history to plan the best treatment.

Disclose all health problems you may have had. Some may interfere with surgery, anaesthesia and aftercare.

Your surgeon needs to know about:

- any allergy or bad reaction to antibiotics, anaesthetic drugs or other medicines, surgical tapes or dressings
- recent illness, including recent infections
- any bleeding disorder or easy bruising
- previous problems with blood clots in the legs or lungs
- recent or long-term illness
- any personal or family history of deep vein thrombosis (DVT)
- thick, raised scarring (keloid or hypertrophic) or poor healing of scars after previous surgery.

Give the surgeon a list of ALL medicines you are taking or have recently been taking. Include medicines prescribed by your family doctor and those bought "over the counter" without prescription. Include medicines such as insulin, warfarin and contraceptive pills that are taken for long-term treatments.

Your surgeon may advise that you not take aspirin, medicines containing aspirin (such as cough syrups), any medicine for a heart condition that thins the blood, large amounts of vitamins (particularly vitamin E), or anti-inflammatory medicines for at least 10 days before surgery. These may increase the risk of excessive bleeding during and after surgery.

Smoking: Stop smoking at least three weeks before surgery, and do not smoke for several weeks after surgery. It is best to quit. Smoking increases surgical and anaesthetic risk, and impairs healing.

ANAESTHESIA

For surgical treatment of pilonidal disease, the patient may have a general anaesthetic, local anaesthetic, or local anaesthetic with sedation. This depends on the particular procedure and the patient's preference. If the procedure requires a general anaesthetic, a short hospital stay may be required. If a local anaesthetic is sufficient, the procedure may be done in the doctor's rooms.

Modern anaesthesia is safe and effective, but it does have some risks. Rarely, side effects from an anaesthetic can be life threatening. Ask your anaesthetist for more information. Give your anaesthetist a list of all the medications you are taking or have taken. Make known any problems that you or a blood relative may have had with an anaesthetic. Inform your anaesthetist about any allergies, heart disease, respiratory disease, diabetes or any other medical condition.

COSTS OF SURGERY

Ask your surgeon to provide an estimate of the surgical, anaesthetic and hospital fees that may apply. This can only be an estimate because the actual treatment may differ from the proposed treatment. If further treatment is needed due to complications or the patient chooses other options, extra costs are likely to apply.

Ask your surgeon about the costs that may be covered by public health insurance or private health funds. Public health insurance benefits are payable in specific cases but not usually for cosmetic reasons. You should discuss costs before treatment rather than afterwards.

If complications occur, more surgery may be needed. This will lead to more costs and inconvenience. A public health insurance or health fund rebate may be available for treatment of complications.

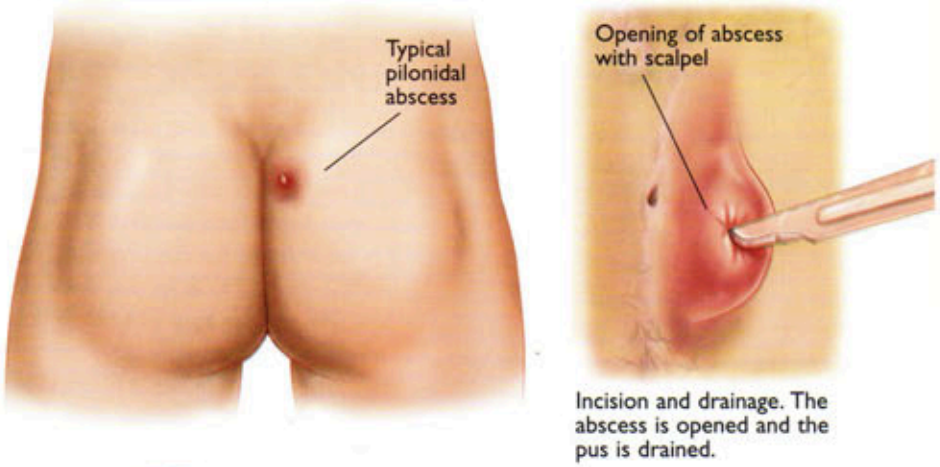
Surgical Treatment of Pilonidal Disease

INCISION AND DRAINAGE

The doctor lances the abscess and drains the pus. This relieves the pain and swelling caused by the acute infection. The abscess is usually washed out with a weak salt solution (saline) to remove any hair and debris. The wound is left open and packed with a small piece of gauze. The gauze either falls out in a couple of days or may need to be changed daily.

While this small operation can cure the problem, four out of every 10 patients having incision and drainage have a recurrence of the disease.

In cases of recurrence, incision and drainage is usually followed by full-excision surgery.

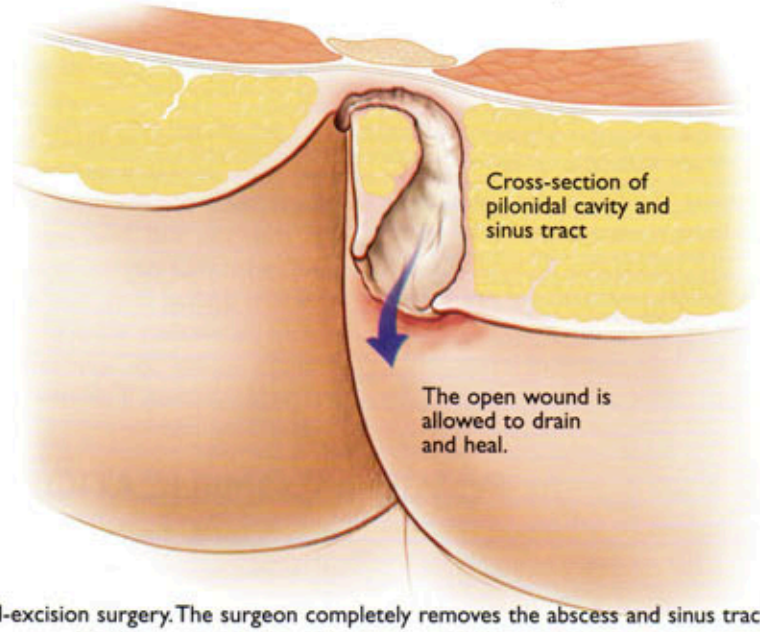


Incision and drainage. The abscess is opened and the pus is drained.

FULL-EXCISION SURGERY

The surgeon uses either a scalpel or a diathermy needle (an electronic cutting blade) to remove the cavity and sinus tracts. Several different techniques are used. The wound is treated in one of the following ways:

- left open to heal from the base. New scar tissue grows at the base of the wound and gradually fills in the cavity. At the same time, the sides of the wound grow new scar tissue. This natural process is called granulation.
- partially closed with a procedure called marsupialisation. The edges of the wound down to deeper tissues are stitched in a buttonhole pattern with absorbable stitches. The wound has the appearance of a pouch. This procedure helps to stop the sides of the wound closing too quickly before the centre of the wound has healed.
- closed with absorbable stitches or stitches that need to be removed later.



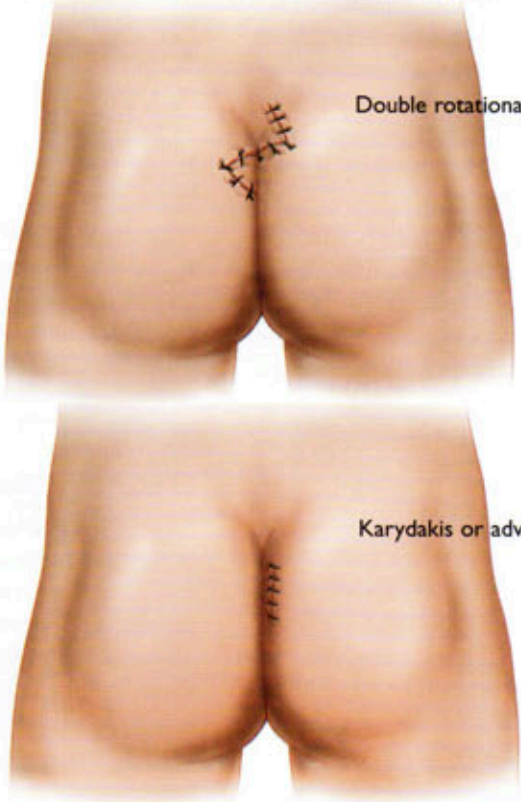
Full-excision surgery. The surgeon completely removes the abscess and sinus tracts. The wound is left open to drain and heal by granulation.

EXCISION AND REPAIR WITH RECONSTRUCTIVE FLAP TECHNIQUES

Most patients with recurrent, complicated pilonidal disease need more advanced surgery that uses skin flaps to close the wound. In these procedures, all infected tissue is cut out, and surrounding skin is moved across the natal cleft and stitched. In this way, the scar is moved to the side. Flap surgery somewhat flattens the "valley" between the buttocks so hairs are less likely to gather there. This eliminates potential entry points for hairs sticking into the skin at the base of the cleft and reduces the risk of further recurrence.

Flap surgery is more complicated than other surgical techniques used to treat pilonidal disease and is typically done under general anaesthetic.

DIFFERENT TYPES OF FLAP TECHNIQUES



RECOVERY AND CARE AFTER SURGERY

INCISION AND DRAINAGE: After this small operation to drain the abscess or cyst, you should be able to drive yourself home from the doctor's rooms. As the local anaesthetic wears off over an hour or two, the wound gradually becomes uncomfortable and painful. You can take over-the-counter painkillers, or the doctor may give you a prescription.

The doctor may pack a small piece of gauze into the wound and cover it with a dressing. Some blood-stained discharge for a day or two is usual. The wound must be cleaned each day and a new dressing applied. Keep the area around the wound free of hair. The wound usually heals within about two weeks.

FULL EXCISION SURGERY: Nursing staff monitor your recovery from a general anaesthetic and give you a painkiller, if necessary. Your wound will be covered with a dressing. A small amount of bleeding or discharge is normal.

After flap procedures, a small drain tube may be inserted near the operation site. While you are in hospital, your dressings and drain tube will be checked regularly by nursing staff. You will be told how to care for the drain tube once you return home and when it will be removed.

You may be able to go home the same day or you may have to stay in hospital for a few days. This depends on the surgery you have had and how you are feeling. Arrange for someone to drive you home. Remember to take loose-fitting clothing to wear home from hospital. You will need to rest at home for the first week, so arrange for someone to help you with day-to-day activities. You may be advised not to drive for the first few days.

Your movements will be slow for the first few days. Sitting may be painful. Avoid picking up heavy objects. Take care going up and down stairs for the first week. These activities may put pressure on incision lines if your wound has been sutured.

Include plenty of fluids and fibre in your diet. A follow-up appointment is usually made for one week after surgery, and then you will have regular appointments with your surgeon to make sure the wound is healing well. You will be given specific instructions about the care of your wound, follow-up appointments and removal of stitches, if necessary.

Your surgeon will give you instructions about resuming normal activities and work.

WOUND CARE: An open wound must be cleaned once or twice daily and repacked with gauze. Packing the wound keeps the sides from coming together until the wound has healed about halfway up from the base. The packing and repacking also helps remove pus and debris tissue from inside the wound.

A wound closed with stitches must be kept clean and dry to help prevent infection. An open wound may take six to eight weeks to heal, while a wound closed with stitches may take four to six weeks. Marsupialisation wounds are smaller than those left open and usually heal within six weeks.

Scar tissue is the final result of wound healing. The new tissue may be tender and itchy for some months.

After healing, to reduce the risk of recurrence of pilonidal disease, the area must be kept thoroughly clean and free of hair. Some surgeons recommend shaving or the use of hair-removal creams every two or three weeks.

POSSIBLE COMPLICATIONS OF SURGERY

All surgical procedures are associated with some risk. Despite the highest standards of surgical practice, complications are possible.

It is not usual for a doctor to dwell at length on every possible side effect or rare but serious complication of any surgical procedure. However, it is important that you have enough information to weigh up the benefits and risks of surgery for pilonidal disease. Most patients will not have complications, but if you have concerns about possible side effects, discuss them with your surgeon.

The following list of possible complications is intended to inform you, not to alarm you. There may be others that are not listed.

GENERAL RISKS OF SURGERY

Possible complications of any surgery include:

- wound infection (treatment with antibiotics may be needed)
- A blood clot deep in the leg, known as a deep vein thrombosis (DVT), may form and require urgent treatment. A DVT can be life threatening
- haematoma (an accumulation of blood around the surgical site that may require drainage)
- pain and discomfort around an incision
- nausea (typically from the anaesthetic; this usually settles down quickly)
- stroke or heart attack due to existing heart disease and the stress of surgery and anaesthesia
- slow healing (most likely to occur in smokers and people with diabetes)
- separation of wound edges
- allergies to anaesthetic agents, antiseptic solutions, suture material or dressings
- the risk of wound and chest infections, blood clots, and lung complications are increased in smokers and obese people
- keloid or hypertrophic scars that become chronically raised, itchy, thick and red. These scars can be annoying but are not a threat to health. Additional surgery or chemical treatment may be needed to try to improve the scar.

SPECIFIC RISKS OF SURGERY FOR PILONIDAL DISEASE

- Despite successful surgery, the problem may recur. Of every 100 people who have surgery and open-wound healing, the disease recurs in five to 15 people. Where the wound is stitched, the recurrence is 11 to 38 people of every 100. After flap surgery, the disease recurs in five to 15 people in every 100.
- The wound may bleed and need immediate attention. An open wound may need to be repacked. Suture lines may break open and bleed or discharge pus. Further surgery would be needed.

REPORT TO YOUR SURGEON

Tell your surgeon or local doctor at once if you develop any of the following:

- temperature higher than 38°C or chills
- persistent pain, redness, pus or swelling around the wound
- heavy bleeding from the wound or incisions
- extensive discharge from the operated area
- nausea or vomiting
- any concerns you have regarding your surgery.

YOUR SURGEON

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