A pilonidal sinus can be explained as a ‘channel’ or sinus which develops in the natal cleft between the buttocks and behind the anus. It commonly involves a hair which has pierced the skin causing a tiny cyst, or the distension of a hair follicle, which then becomes blocked (Grant, 2009). Once the sinus becomes infected, a pus-filled abscess can develop, leading to a wound if left untreated. When the sinus requires surgery, the condition can result in a painful wound that may take months to fully heal (Stephen-Haynes, 2008).

The anatomical location of the wound and its association with poor hygiene can also lead to feelings of embarrassment. Patients may be concerned about recurrence and the risk of further infection.

Meticulous hygiene is key in promoting wound healing and preventing recurrence, for instance washing after each bowel movement should be recommended (Harris et al, 2012).

CAUSE

Two main theories have been advanced for the cause of pilonidal sinuses:

- **Congenital**: originally it was thought that pilonidal sinus developed in patients who were predisposed due to a ‘dimpling’ of the natal cleft, meaning that hair and debris such as dead skin cells could collect there (Timmons, 2007; Stephen-Haynes, 2008)
- **Acquired**: another later theory is that the development of pilonidal sinus can be influenced by puberty (Bascom, 1983; Hashmi, 2008), when the hair follicles become swollen with keratin, resulting in an inflammatory response, folliculitis and eventually the formation of an abscess.

They can also be caused by ‘stretching’ and ‘pulling’ in the deeper levels of tissue in the natal cleft, causing disruption and eventual rupture of the hair follicle.

Presentation is more common in males than females and is often seen in younger people due to hormonal...
PILONIDAL SINUS — WHO’S AT RISK?

Pilonidal sinus wounds are more common in young people with the peak onset between 19 and 22 years of age (Harris et al, 2012).

The incidence of pilonidal sinus is 26 per 100,000 (Bradley, 2006). Recent National Institute for Health and Care Excellence (NICE) Clinical Knowledge Summaries (2014) and Marza (2013) state that the condition is more likely to occur in certain groups, including:
- Males (male/female ratio being 4:1 [Harris et al, 2012])
- Those aged 15–40 years
- White Europeans
- Those with unusual male hair growth in women (hirsutism)
- Those with a deep pit in the natal cleft
- People whose occupation involves long periods of sitting
- Where there is a family history
- People who are obese.

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Changes affecting the skin (Stephen-Haynes, 2008).

CLINICAL PRESENTATION

The clinical presentation of pilonidal sinus is categorised according to severity (Table 1).

The most common presentation in the clinical setting is a swollen, usually painful lesion in the sacral area close to the patient’s anus (4–5cm away).

Patients will typically present with an abscess and clinical signs including local warmth, redness, local pain and tenderness, and possible induration (increase in fibrous tissue). Hair may be seen projecting from the site of the sinus (Lanigan and Dyne, 2015).

Table 1: Symptoms and management of pilonidal sinus (adapted from Marza, 2013)

<table>
<thead>
<tr>
<th>Symptomatic</th>
<th>Asymptomatic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Chronic</td>
</tr>
<tr>
<td>Pain at wound site</td>
<td>Pain at wound site</td>
</tr>
</tbody>
</table>
| Discharge | With or without malodorous discharge (pus and blood)
| Swelling | With or without cellulitis |
| Abscess | Infection |
| Inflammation | Postoperative wound care |

TREATMENT

The location of the pilonidal sinuses in the natal cleft and the subsequent stigma around poor hygiene, although often misplaced, can lead to feelings of embarrassment. Patients may also be worried about recurrence of the sinus and the risk of further infection.

There are several treatment strategies that are recommended for pilonidal sinus, including (Stephen-Haynes, 2008):
- Conservative: particularly used in non-severe presentations and involves antibiotics to clear any infection and prevent surgery as well as preventative measures such as regular cleansing and shaving of the area
- Minor surgery: in smaller non-infected cases any hair can be removed from the abscess/follicle and the track cleaned out
- Surgery: excision of the affected tissue — including abscesses and inflammation — followed by primary closure and wide excision, where the sinus is ‘laid open’ and heals by secondary intention.

Complications

Complications can develop after surgery to excise or lay open the sinus, with cost implications in terms of repeated surgical procedures, extended inpatient stays and/or postoperative

Table 2: Symptoms and management of pilonidal sinus (adapted from Marza, 2013)

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute</td>
<td>Chronic</td>
</tr>
<tr>
<td>Pain at wound site</td>
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| Discharge | With or without malodorous discharge (pus and blood)
| Swelling | With or without cellulitis |
| Abscess | Infection |
| Inflammation | Postoperative wound care |

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wound care in the community (Harris and Holloway, 2012).

Other complications of a pilonidal sinus can include:
- Infection (Harris and Holloway, 2012)
- Haemorrhage at the wound site
- Delayed healing
- Wound break-down
- Wound recurrence
- Psychological issues, particularly embarrassment and stigma due to the positioning of the wound and associations with poor hygiene.

Nurses should promote meticulous hygiene to ensure smooth wound healing and prevent recurrence — as mentioned above, washing after each bowel movement is particularly recommended (Harris et al, 2012).

NURSING MANAGEMENT

Nurses should consider a range of factors including pain, underlying conditions, patient’s sensibilities regarding the wound site, and potential infection. The following are important:
- Management of pain, particularly in patients admitted as an emergency (Timmons, 2007)
- Nurses should give consideration to any underlying conditions that may be a contributing factor or give rise to complications, such as diabetes, use of steroids, weak immune system etc (Stephen-Haynes, 2008)
- It is also very important that clinicians remember that patients may be unprepared for the size of the wound that may be uncovered, as the opening of the abscess itself may appear small.
- The patient’s vital signs, such as temperature, are also important as an indicator of potential infection (Stephen-Haynes, 2008).

Specific wound care

Specific wound care considerations when dealing with a pilonidal sinus include (Bradley, 2006):
- Wounds in this area can heal quickly as they are well perfused, however, healing can be affected by organisms regularly found in the natal cleft
- Due to the frequency of dressing changes required — and the pain involved — dressings that not only conform to the wound, but which are atraumatic on removal (e.g. gelling fibre dressings), should be considered in this area
- Due to the delicacy of the periwound skin and the location of these wounds, a dressing that can absorb exudate, prevent leakage, and conform well to the wound bed is desirable
- Shaving around the periwound skin can also help with atraumatic removal of dressings, as well as preventing recurrence

PREVENTION

The natal cleft requires special attention with regards cleaning and should be kept as free from hair as possible. This can be done by weekly shaving; similarly, the use of a hair removal cream up to the age of 30 is recommended to prevent recurrence.

EXUFIBER — A NEW GELLING FIBRE DRESSING

Exufiber® (Mölnlycke Health Care; www.molnlycke.co.uk/exufiber) is a unique gelling fibre dressing that incorporates patented Hydrolock® technology to address the challenges of highly exuding wounds while improving the patient experience (Figure 1).

Hydrolock technology consists of strong polyvinyl alcohol (PVA) fibres that are ‘entangled’ in all directions and mechanically secured to each other, providing high integrity when wet (Figure 2).

The PVA fibres work to minimise free fluid inside the dressing and enable superior retention (Figure 3) (SMTL, 2014).

Intended use

Exufiber is intended to be used on a wide range of exuding wounds, including:
- Pilonidal sinuses
- Leg and foot ulcers
- Pressure ulcers
- Partial-thickness burns
- Surgical wounds
- Donor sites
- Malignant wounds
- Dermal lesions and other external wounds inflicted by trauma.

The superior retention capacity (SMTL, 2014) of Exufiber reduces the risk of leakage and maceration to the surrounding skin and supports effective exudate management.

Five-minute test

Answer the following questions about this article, either to test the new knowledge you have gained or to form part of your ongoing practice development portfolio.

1 – Can you explain why a pilonidal sinus may form?
2 – How are pilonidal sinuses categorised?
3 – Name some of the common symptoms of a pilonidal sinus.
4 – What are some of the common complications of a pilonidal sinus?
5 – Can you explain how best to deal with the exudate produced by a pilonidal sinus?
Due to the high wet tensile strength, Exufiber can be removed in one piece to avoid fibre shedding, making it ideal for both cavity and sinus wounds. Exufiber allows dressing changes to be less time consuming while minimising pain for the patient.

CONCLUSION

The treatment of pilonidal sinuses have many implications for community nurses, particularly pain management and post-surgical wound care. Good personal hygiene is also crucial when seeking to prevent recurrence and nurses are ideally placed to advise patients on how to avoid the development of further sinuses, but also to reassure them about pain and exudate control, which can both be distressing and uncomfortable.

With regards to wound care, it is essential that nurses use an appropriate dressing post-surgery, particularly one that can absorb exudate but can be removed without pain or trauma.

REFERENCES

SMTL (2014) SMTL method TM-404 for Free Swell Absorption and Retention. Test performed at SMTL, UK. Laboratory report 20140806-001. For further information contact Mölnlycke Health Care on: 0800 917 4918

KEY POINTS

- The treatment of pilonidal sinus has many implications for community nurses such as pain management and post-surgical wound care.
- Good personal hygiene is crucial when seeking to prevent recurrence and nurses are ideally placed to advise patients on how to avoid the development of further sinuses.
- They can also reassure patients about pain and exudate control, which can both be distressing and uncomfortable.
- Wounds in this area can heal quickly as they are well perfused, however, healing can be affected by organisms regularly found in the natal cleft.
- Due to the delicacy of the periwound skin and the location of these wounds, a dressing that can absorb exudate, prevent leakage and conform well to the wound bed is desirable.
- Exufiber® (Mölnlycke Health Care) is a unique fibre dressing that incorporates patented Hydrolock® technology to address the challenges of highly exuding wounds while improving the patient experience.
- It is essential that nurses use an appropriate dressing post-surgery, particularly one that can absorb exudate but can be removed without pain or trauma.
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