Pilonidal Sinus Post-operative Wound Management

Site Applicability

All VCH and PHC sites – Acute, Community, Long Term Care

Practice Level

Professions	Level of Training
Nurse Practitioner (NP)	Basic Skill
Registered Nurse (RN)	Basic Skill
Registered Psychiatric Nurse (RPN)	Basic Skill
Licensed Practical Nurse (LPN)	With additional education for packing nonvisible wound base

Policy Statements

The use of Sitz bath requires an order from a Physician/NP.

Need to Know

- Pilonidal sinus disease is thought to arise from in-growing hair in the natal cleft (cleavage between the buttocks), which then becomes infected and forms an abscess.
- Originally thought to be congenital but recent studies suggest pilonidal sinus is an acquired disease.
- Mostly affects young adults between the ages of 20-40, occurring in men twice as often as women.
- Risk factors include family history, shape and curvature of the buttocks, abundant hair to buttock area, sitting for over 6 hours a day, obesity, and local irritation or trauma.
- Clients with this condition present with painful swelling to the natal cleft associated with an abscess (with or without purulent exudate).
- Conservative management for clients whose symptoms are not severe may include hair removal to the surrounding skin, good hygiene to the area and broad spectrum antibiotics.
- Abscess formation, cellulitis, and purulent exudate require acute management which includes antibiotic therapy and incision and drainage followed with primary wound closure or wound healing by secondary intent.
- Chronic or complex/recurrent pilonidal sinus disease with extensive branching sinus tracts requires wide surgical excision of involved tissue. This may be followed by reconstructive procedures.
- Care of pilonidal sinus wounds is highly individualized and there may be a specific Physician/NP Order.

- Clients may present post-operatively with a closed primary incision, a primary closure opened due to infection and dehiscence or surgical excision left open to heal by secondary intention.
- Wounds healing by secondary intention require packing if there is depth/undermining/sinus tract.
- Post-operative management following incision and drainage or excision procedures may include removal of large amounts of packing which may be difficult and painful to remove.
- Current literature indicates that clients with primary surgical closure of wounds heal faster than wounds healing by secondary intent. However, reoccurrence rate is higher in primary closed wounds compared to secondary closure after wide excision.
- Recurrence of pilonidal sinus disease may occur for various reasons such as failure to identify one or more sinuses at incision and drainage, secondary infection, inadequate wound care, and insufficient attention to depilation and trauma.
- There is no evidence to support the use of Sitz bath in improving healing rate or pain relief. However it can promote client comfort.
- There is mixed evidence to suggest hair removal will prevent or reduce reoccurrence of pilonidal sinus disease.
- Although perianal fistula and perianal abscess develop in the same region of the buttock they are not the same as pilonidal sinus.
- Due to the location of these wounds, to keep a dressing on and maintain a dressing seal can be challenging. There are situations where the wound cannot be covered with a dressing.

Practice Guideline

Assessment: see Wound Management Guideline

Obtain a patient history as the pilonidal sinus may be sudden onset, a chronic abscess, or recurrent.
Assess pain level (type, location, frequency, quality, precipitating/alleviating factors) and its impact on activities of daily living.
Assess the client for risk factors that affect wound healing including: • Inadequate nutrition • Impaired oxygen • Chronic medical conditions, especially those that compromise immune status (e.g. diabetes, presence of autoimmune disease) • Heavy growth of coarse hair in buttock area • Prolonged sitting (over 6 hours a day) • Local irritation or trauma • Poor hygiene Assess client's activities that may contribute to friction, shear, pressure and moisture to the wound such as excessive walking, prolonged periods of sitting, playing sports and specific occupations.
Assess for psychosocial concerns including: • Understanding of wound healing process and risk factors • Impact of wound on body image • Ability to participate in the plan of care • Availability of support systems • Financial concerns

Complete a wound assessment – see Wound Assessment and Treatment Flowsheet Guideline

- Use a head lamp and a magnifying glass, if available, to better visualize the wound bed.
- In addition to the basic wound assessment, pilonidal sinus -specific assessments includes:
  - Assessing for friable granulation tissue, hypergranulation tissue, sinus tract in the base, and epithelial bridging as these are signs of increased bacterial bioburden and local wound infection
  - Assess the wound bed for hair and debris.

Interventions:

Client Factors	
Manage Risk Factors Affecting Healing	• Improve nutrition. Dietitian consult as needed • Monitor and manage existing illness /conditions • Avoid sitting for prolonged time • Avoid activities that cause irritation or trauma to wound • Remove hair from periwound area • Maintain good hygiene • Consider dressing that are atraumatic to wound/periwound • Consult Occupational Therapist (OT) for pressure redistribution
Manage Pain	• Encourage client to take analgesic pre-dressing change • Encourage regular dosing of pain medication as prescribed • Monitor effective of analgesics
Wound Treatment	
Positioning Client for Dressing Change	• Position client in prone position with 1 or 2 pillows under the pelvis. This increases comfort and allows for better visualization of wound bed and will prevent tightening of the buttocks. • If client is unable to stay in this position, try standing up and bent over a table or stretcher for support. Client can assist by gently spreading the buttocks during wound care.
Cleaning Wound	Debris and fecal material can get trapped in the hair around the wound/anus. 1. Remove old dressing and irrigate wound with at least 100 mL or more of NS or sterile water. 2. Cleanse periwound skin and surrounding skin (at least 4 cm around the wound) with topical antiseptic agent such as Chlorhexidine 0.5% or Povidone 10% to decontaminate the skin. Leave agent in place x1 minute and then rinse off with NS.

Cleaning Wound (cont'd)	3. Shave (in the direction of hair growth) regularly as needed (usually weekly) or clip hair in the periwound skin and all around the area where dressing and tape comes in contact with. Ensure hair does not get into wound. If hair present in wound remove with force or by flushing with NS. Use a magnifying glass and headlamp to help visualize if available. 4. Irrigate wound/cleanse periwound with at least 100 mL or more of NS or sterile water until fluid return is clear see Wound Cleansing Procedure. **Note:** Sitz bath can be used for comfort and personal hygiene (if ordered by Physician/NP). It does not provide adequate wound cleansing. If sitz bath is used, the wound must be cleansed afterwards, following the steps above.
Prevent and Control Wound Infection **Treat Friable Granulation Tissue or Hypergranulation Tissue**	See Infection Prevention and Treatment Guideline (pending) Friable granulation tissue, hypergranulation tissue, pocketing in the base, and epithelial bridging are all signs of increasing bacterial burden/local wound infection and require removal. Consult Nurse Specialised in Wound, Ostomy, Continence (NSWOC) or Physician/ NP for use of silver nitrate as an immediate treatment.
Wound Packing **Dressing selection for wounds where the seal of the dressing can be maintained for at least one day**	Wounds healing by secondary intention require packing if there is depth/undermining/sinus tract see Wound Packing Procedure. Dressing selection is based on the location of the wound, wound assessment, and client concerns. Frequency of dressing changes depends on wound exudate and products used. **Select a dressing that will:** • Maintain moisture balance • Conforms to contour of natal cleft to get a good seal • Reduces friction with movement • Manage the amount of wound exudate • Decrease trauma to wound with removal • Allow client to do manage self-care • Maintain integrity of surrounding skin • Be cost effective (consider frequency of dressing change and impact on client/wound) **To help maintain a dressing seal:** Consider using ostomy strip paste to seal dressing at the base of the anal verge. **For bleeding wounds:**

	Consider using Calcium Alginate dressing to pack wound. If bleeding is associated with friable granulation tissue, use antimicrobial dressing as this is a sign of bacterial burden. **For painful wounds:** Use Calcium Alginate or Hydrofiber to pack wound as these products are soft, gel up when in contact with exudate and are gentle to remove. **For highly exudative wounds:** Use Mesalt, Polyhexamethylene Biguanide (PHMB), Hydrofiber, or Calcium Alginate. Consider potential wound infection for wounds which are highly exudative. **For wounds with signs of local wound infection:** Use topical antimicrobial wound dressing: Silver, Iodine, PHMB, and medical honey based dressings.
For wounds very close to the anus and a <u>dressing seal is not possible)</u>	For wounds soiled by stool, packing does not stay in-situ for more than 24 hours, or more than daily Sitz baths have been ordered by the Physician/NP, consider not packing the wound: • Use an absorptive pad to cover wound and secure with mesh underwear. Change at least daily and PRN. • Resume wound packing/dressing when a dressing seal is possible.
Evaluate Wound Healing Progress	Follow agency policy for frequency of wound evaluation – full assessment weekly. If wound is not improving or deteriorating: • Consult an NSWOC or Physician/NP. • Assess for factors affecting healing. • Consider use of adjunctive therapies - e.g. Negative Pressure Wound Therapy (NPWT).
Refer to other Disciplines	Refer to Dietitian, OT, PT, SW, Physician/NP, and NSWOC as appropriate.
Promote Client Self - Management	Teach client to: • Use hand shower, peri-bottle or NS bottle with irrigation spout to clean the wound daily, after each bowel movement or sitz bath (if ordered). • Shower by tilting forward or to the side to direct soap, shampoo and loose hair away from the wound/natal cleft. • Report signs and symptoms of infection. • Keep dressing clean and dry. • Change dressing as needed and as directed. • Limit physical activities that cause increased friction, pressure, shear and moisture to the buttock.

	• Maintain good hygiene especially around natal cleft. • Wear breathable loose clothing. • Monitor closed wound for reoccurrence. • Consider long term hair removal to natal cleft.

Expected Patient/Client/Resident Outcomes

- Client's wound is healed.
- Client/family is able to manage ongoing self-care.
- Client will be free of wound infection.

Patient/Client/Resident Education

- See Promote Client Self-Management section above
- Provide Care of your Pilonidal Sinus Wound Pamphlet (pending)
- Review Caring for Your Wound pamphlet with the client:
  - FO.160.W9151 (booklet format)
  - FO.160.W9151F (factsheet format)

Documentation

As per agency policy.

Related Documents

- Wound Cleansing Procedure (BD-00-12-40072)
- Wound Packing Procedure (BD-00-12-40073)
- Wound Bed Preparation Guideline *(pending)*
- Wound Infection Guideline *(pending)*

References

1. http://www.worldwidewounds.com/2003/december/Miller/Pilonidal-Sinus.html
2. Last Modified: Wednesday, 25-Nov-2009 15:40:13 GMT
3. NS408 Timmons J (2007). Diagnosis, treatment and nursing management of patient with pilonidal sinus disease. Nursing Standard. 21, 52, 48-56. Date of acceptance: July 31 2007
4. Tinsley, Philippa (2002). The management of a pilonidal sinus and its follow-up care. British Journal of Nursing. 11:20, S31-36
5. AL-Khamis A, McCallum I, King PM, Bruce J. (2011),\. Healing by primary versus secondary intention after surgical treatment for pilonidal sinus (Review). The Cochrane Collaboration
6. Irion, G (2009) Pilonidal Disease. Acute Care Perspectives. 18:3, 3-5
7. Stephen-Haynes, J (2008) Pilonidal sinuses: Aetiology, and nursing management. Wound Essential. 3, 128-133

8. Bradley, L. (2010) Pilonidal sinus disease: a review. Part one. Journal of Wound Care. 19:11, 504-530
9. Pin D, Chi T, Li Goh, Ang NK E. (2010) The effectiveness of sitz bath in managing adult patients with anorectal disorders: A systemic review. JBI Library of Sytemic Reviews. 8: 11, 447-459
10. Harris C., Holloway S. (2011). Development of an evidence-based protocol for care of pilonidal sinus wounds healing by secondary intent using a modified reactive Delphi procedure. Part one: the literature review. International Wound Journal. 9:2, 156-172
11. Harris C , Holloway S. (2011) Development of an evidence-based protocol for care of pilonidal sinus wounds healing by secondary intent using a modified reactive Delphi procedure. Part two: methodology, analysis and results. International Wound Journal. 9:2, 173-188
12. Harris C, Laforet K, Sibbald RG, Bishop R (2012) Twelve Common Mistakes in Pilonidal Sinus Care. 25:7, 324-335
13. Harris C; Sibbald RG; Mufti A; Somayaji R (2016). Pilonidal Sinus Disease: 10 Steps to Optimize Care Advances In Skin & Wound Care, ISSN: 1538-8654, 2016 Oct; Vol. 29 (10), pp. 469-78
14. http://pilonidal.org
15. https://www.woundscanada.ca/docman/public/health-care-professional/bpr-workshop/555-bpr-prevention-and-management-of-surgical-wound-complications-v2/file
16. http://www.swrwoundcareprogram.ca/Uploads/ContentDocuments/HCPR%20-%20Pilonidal%20Management%20Guide.pdf
17. http://www.swrwoundcareprogram.ca/102/pilonidal_sinuses/
18. Biter LU; Beck GM; Mannaerts GH; Stok MM; van der Ham AC; Grotenhuis BA, The use of negative-pressure wound therapy in pilonidal sinus disease: a randomized controlled trial comparing negative-pressure wound therapy versus standard open wound care after surgical excision. Diseases Of The Colon And Rectum, ISSN: 1530-0358, 2014 Dec; Vol. 57 (12), pp.1406-11
19. Segre D; Pozzo M; Perinotti R; Roche B; The treatment of pilonidal disease: guidelines of the Italian Society of Colorectal Surgery (SICCR) Italian Society of Colorectal Surgery Techniques In Coloproctology, ISSN: 1128-045X, 2015 Oct; Vol. 19 (10), pp. 607-13
20. https://www.uhn.ca/PatientsFamilies/Health_Information/Health_Topics/Documents/Having_a_Sitz_Bath_at_Home.pdf
21. www.awhinahealthcampus.co.nz/.../WOUND_ASSESSMENT_&_DOCUMENTATIO...
22. http://www.worldwidewounds.com/2004/january/Collier/Management-of-Wound-infections.html

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	The Provincial Nursing Skin and Wound Committee in collaboration with Regional Skin & Wound Committees from NHA, IHA, FHA, VIHA, PHSA & VCH/PHC NSWOC, Clinical Nurse Specialist, Skin & Wound, PHC NSWOC, Clinical Nurse Specialist, Wound Ostomy Continence, VCH Nurse Clinician, Burn Plastic Trauma Unit, VGH NSWOC, VGH NSWOC, LGH NSWOC, Nurse Practitioner- Long Term Care, Residential Program, VCH NSWOC, Pender Community Health Centre, VCH NSWOC, Nursing Informatics, Clinical Lead (Pixalere) IMITS - Clinical Solutions - Community Applications, VCH Provincial Nursing Skin and Wound Committee, VCH *NSWOC = Nurse Specializing in Wound Ostomy Continence	