

Identifying the “Hole” Picture; Working Towards Personalizing Treatment for Pilonidal Disease

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Identifying the “Hole” Picture; Working Towards Personalizing Treatment for Pilonidal Disease

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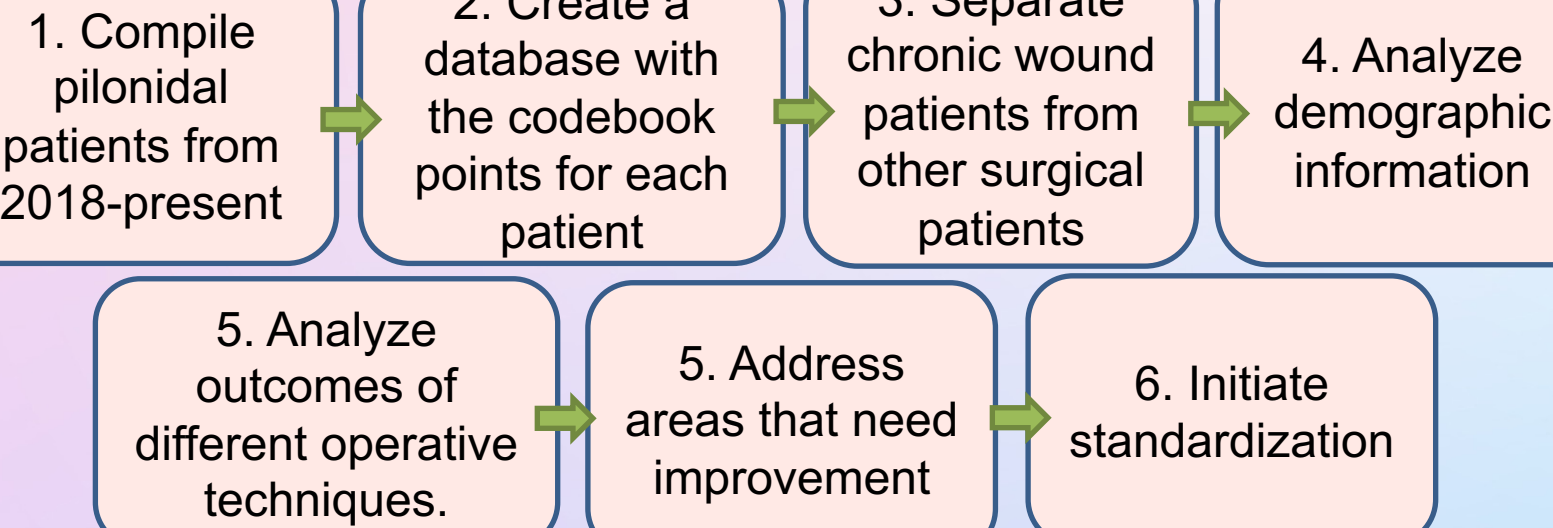
Introduction and Objectives

- Pilonidal disease is characterized by abscesses and sinuses that appear in the skin of the natal cleft that affects male and female adolescents and young adults.⁴
- This disease is often treated with various surgical procedures such as trephination, incision and drainage, and cleft lifts.³
- Trephination new minimally invasive surgical technique used to treat pilonidal patients.^{1,2}
- The purpose of this quality improvement project is to investigate the demographics of patients surgically treated for pilonidal disease at Lehigh Valley Reilly Children’s Hospital, analyze our current patient outcomes, and identify areas for future improvement.

Methodology

Inclusions: patients ages 0-25 primarily treated at LVHN for pilonidal disease with surgery from 2018-present

Exclusions: patients with chronically open draining wounds, not predominately treated at LVHN for pilonidal disease, and treated prior to 2018



Results

Patient characteristics

Patients	77
Sex	
Male	32 (42%)
Female	45 (58%)
Age	
Mean	15.5
Range	11-21
BMI	
Mean	27.30
Range	18.35-46.18
Number of Pits	
Average	2
Symptom Chronicity	
Week(s)	35 (49%)
Month(s)	21 (30%)
Year(s)	15(21%)
Trephination	
Patients	32(42%)
Post-op Reoccurrence	3 (9%)
Reoperation	3 (9%)
Trephination for acute infection	
Patients	36 (47%)
Post-op Reoccurrence	11 (36%)
Reoperation	7 (19%)
Mental Illness	
Patients	16 (21%)
Opioid Use	
Patients	0 (0%)

Figure 1 Data table for patient characteristics for surgical patients excluding open wound

Pre-op notes

Name: xxxxx
Age: #
Sex: male/female
ER visits prior: #
Previous Intervention: yes/no
Pre-visit Abx: #
Hair Burden: 1=none, 2=mild, 3=moderate, 4=significant
Pits/ Sinuses: #
Acute infection: yes/no
Chronic wound: yes/no
Off-midline or midline infection/abscess: 0=N/A 1=off-midline 2=midline
Symptom chronicity: 1=weeks, 2= one month or more, 3=one year or more
Trauma: yes/no
Preop-Abx: yes/no
Initial management: OR, non-op, or in office drainage

Figure 2 Template for Pre-Op Note



Figure 3 Before and after images of a trephination patient’s natal cleft

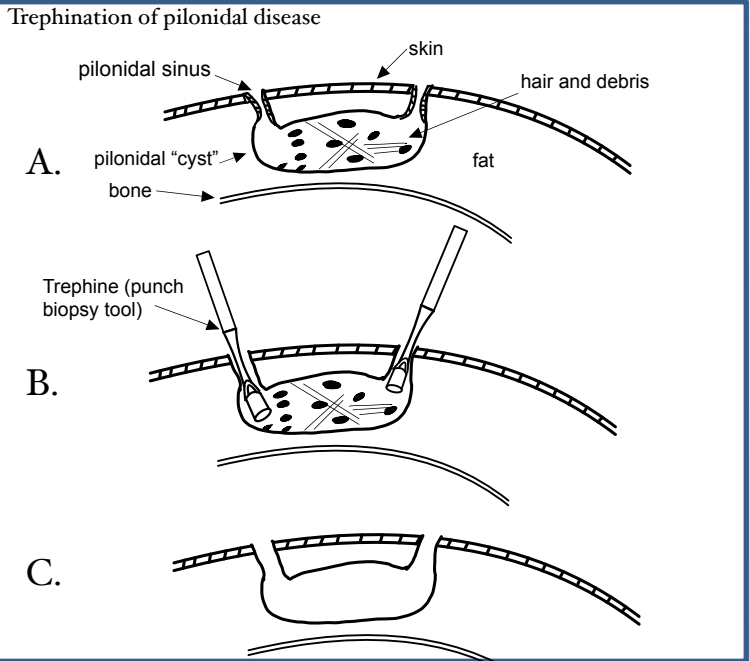


Figure 4 Diagram of trephination procedure

Conclusions

- People of all sexes, races, and BMIs are at risk for pilonidal disease.
- Despite historical data, females are just as likely to have pilonidal disease.
- The majority of patients are overweight.
- There is room for improvement with note taking.
 - Symptom chronicity, hair burden, and wound class data was often missing and non-specific.
 - A model of hair burden and wound class may improve the quality of future data.
- Trephination provides a low reoccurrence rate, while trephination for acute infections dramatically increases the reoccurrence rate.
- Improved documentation through standardized EPIC note templates can help improve outcome analysis.

Future Directions

- Create hair burden and wound class scale with corresponding pictures to improve data for future studies that is agreed upon by LVHN surgeons
- Implement the Epic templates for pre-operative, operative, and post operative notes
- Continue project with improved data from templates to develop personalized treatment plans for patients based on factors such as symptom chronicity, hair burden, number of pits, and previous interventions
- Determine effects of symptom chronicity, hair burden, number of pits, mental illness and wound class on reoccurrence

References

