Less Aggressive Approach to Pilonidal Disease Results in Fewer Missed Workdays

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Background

Pilonidal disease is a suppurative condition of the sacrococcygeal region. There are a variety of surgical techniques to treat the condition with greater than fifty percent resulting in an open wound, necessitating daily wound care. This can lead to significant morbidity, and days to months of lost productivity and lost days from work, or combat effectiveness, termed "readiness". Minimizing this morbidity and getting service members back into the fight, are key concepts to preserve readiness and the overall fighting strength for battle. Civilian patients can also be significantly impacted by lost work hours related to care for pilonidal disease. The objective of this paper is to evaluate the impact of pilonidal disease on lost productivity.

Methods

This was a retrospective chart review of patients at a single military treatment facility from 2009-2017. 75 active duty soldiers were identified by their procedure code for pilonidal disease were compared on multiple demographics including: age, body mass index, race, gender, tobacco smoking, recurrence, duty limiting profiles, and ultimate disposition from the military. Operative intervention compared was with outpatient management. Main outcome measures were incidence of healing, recurrence rates, and timeline to recurrence, the number of clinic visits, and the number of profile days.

Results

Patients in the operative group on temporary, duty limiting profile, were on profile for 72.4 days while the outpatient group spent an average of 15.8 days on temporary, duty limiting profile. (p= 0.05).

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Demographics	
	Mean (range)
Age (yrs)	25.6 (18-43)
Surgery duration	37.6 (7-114 minutes)
Days to healing	88 (4-708)
BMI day of surgery	27.9 (20.1-40.6)
Days to recurrence	353 (34-1280)
Follow-up duration	39 (1-119 months)
Number of visits	14 (1-75)

Demographics by Subgroup			
	Outpatient (n= 23)	Operative (n= 52)	P-value
Age (mean)	24.04	26.31	0.12
Number of visits	8.04	17.1	0.001
Follow-up months	44.48	26.4	0.283
Rank (Enlisted)	22	46	0.324
BMI at DOS	27.29	28.3	0.328
Race:			
White	15	40	
African American	6	6	
Hispanic	1	3	
Asian/ Pacific Islander	0	2	
Other	1	1	
Gender (male)	16	49	0.04
Previous surgery	5	25	0.032
Tobacco use	4	17	0.389

Reccurence by Group		
	Outpatient	Operative
Recurrence rate	7 (30%)	11 (21%)
Incomplete (never healed)	3 (13%)	12 (43%)
Healed without recurrence	13 (57%)	29 (56%)

Discussion

Pilonidal disease is an especially significant in the military demographic as many service members fall within the peak age range. If severe enough, service members may require evacuation from deployment in a remote austere environment or aboard a ship at sea. When any service member is medically evacuated, that comes with a cost in dollars, risk to the service member and evacuation team, potential mission readiness degradation or degradation of combat effectiveness and decrease in morale. In a deployment setting, surgical treatment, may be limited by location, supplies, or personnel. Managing a chronic, open wound is problematic and much more difficult in an austere environment. It is essential that the readiness be preserved to maintain the strength of the unit. This is achieved through minimizing the morbidity of open wounds and safely returning the service member to the fight.

Limitations

This was a retrospective chart review of a small sample size at a single institution, identified by procedure code. Patients were not randomly selected for one management group or the other. We were unable to quantify the severity of the disease based on review alone. This cohort is too small to make effective recommendations regarding the use of surgery versus non-surgical management.

Conclusion

Patients undergoing surgical management of pilonidal disease have a significantly higher number of clinic visits and lost work days when compared to outpatient therapy.

References

Available on request.