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Letter to the Editor

Pilonidal disease at a Veteran Affairs hospital

Dear Editor:

We write in response to the manuscript published by Hatch et al. in a recent issue of *The American Journal of Surgery* addressing pilonidal disease in their institution by the Bascom cleft lift technique.[1] Their analysis included a large cohort of patients (n = 235). The rate of recurrence was excellent (4.7%). The was a 54% rate of minor and major complications in this cohort. This manuscript illustrates the complexity of dealing with a vexing surgical issue whose morbidity and recurrence has minimally changed over time regardless of procedural approach.[2]

At the Veteran Affairs (VA) North Texas Health Care System (VANTHCS), we have treated 122 Veterans for pilonidal disease between 2005 and 2017. We find a trend in the number of cases over time that correlates with a decrease in age of our VA patient population (Fig. 1). Our patient population was substantially different from Hatch et al. study: older age (41.4 ± 14.1 *vs.* 27.0 ± 11.0 years), larger BMI (33.1 ± 6.6 *vs.* 30.6 ± 7.6 Kg/m^2) with higher representation of BMI ≥30.0 Kg/m^2 (66.4% *vs.* 43.9%), a higher proportion of male patients (95.0% *vs.* 67.1%), and greater co-morbidities including diabetes mellitus (18.0% *vs.* 3.4%), active smoking (52.5% *vs.* 24.1%), and hypertension (32.0% *vs.* 3.8%).

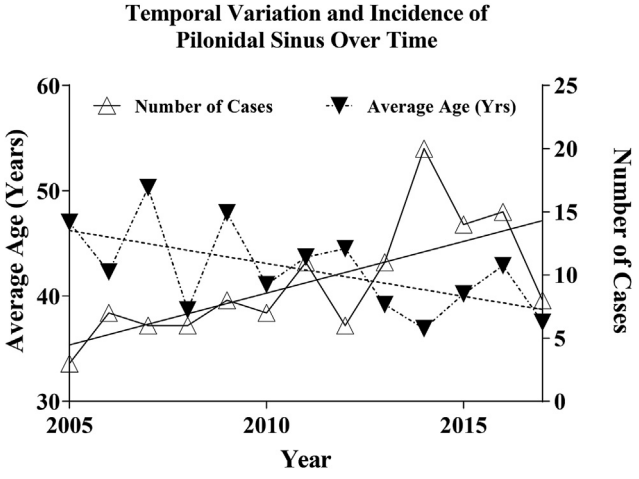

Fig. 1. Temporal variation and incidence of pilonidal sinus over time.

The preferred method at the VANTHCS has been a midline incision with complete excisional biopsy of the pilonidal sinus and primary closure (65.6% of patients). Midline excisional biopsy with negative wound pressure therapy has been utilized in 23.0% of the patients and with wet-to-dry approach in 9.8% of the cases. The Bascom procedure has been utilized in only 1.6%.

In our patient population the complication rate was half of that presented by Hatch et al. (22.1% vs. nearly 50%) but at the expense of twice the recurrence rate (10.7% vs. 4.7%). We found no difference in the rate of complications or recurrence independent of the technique that was utilized ($p = 0.2$). The most common complications in patients that underwent primary closure were wound dehiscence and wound infection. On univariate analysis, no comorbid condition variable had an association with complications or recurrence. Multivariable logistic regression revealed length of operation (OR 1.1, 95% CI: 1.0 to 1.1) and patient's age (OR 1.1, 95% CI: 1.0 to 1.1) as the only independent predictors of complications. No variable emerged as an independent predictor of recurrence (Table 1).

In agreement with Hatch et al. we did not find active smoking as a predictor of complications nor recurrence. But, we have found active smoking to be a predictor of complications and recurrence in the same population of patients undergoing inguinal hernia

Table 1
Outcomes of patients undergoing surgery for the management of pilinidal sinus.

	Complications					Recurrence		
	Yes (n = 27)	No (n = 95)	*p*	OR	95% CI	Yes (n = 13)	No (n = 109)	*p*
Age (years)	45.0 ± 13.4	40.4 ± 14.2	0.1	1.1	1.0–1.1	34.8 ± 11.3	42.0 ± 14.2	0.1
BMI (kg/m^2)	33.9 ± 5.8	32.9 ± 6.8	0.5	–	–	34.2 ± 5.1	33.0 ± 6.7	0.8
OR Time (min)	35.5 ± 14.4	28.2 ± 12.6	0.01	1.1	1.0–1.1	32.2 ± 10.4	29.5 ± 13.6	0.5
Diabetes	4.1%	13.9%	1.0	–	–	0.8%	17.2%	0.5
HTN	6.6%	25.4%	0.8	–	–	1.6%	30.3%	0.2
Lipids	6.6%	24.6%	1.0	–	–	0.8%	22.1%	0.1
Cardiac	2.5%	8.2%	1.0	–	–	0.0%	10.7%	–
Pulmonary	3.3%	10.7%	1.0	–	–	0.8%	13.1%	0.7
Smoker	14.8%	37.7%	0.1	–	–	3.3%	49.2%	0.1
ETOH	13.1%	36.1%	0.3	–	–	5.7%	43.4%	0.8
BMI > 30	17.2%	49.2%	0.2	–	–	8.2%	58.2%	0.5
Prior excision	9.0%	34.4%	0.8	–	–	6.6%	36.9%	0.2

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repair.[3] In contrast to Hatch et al., we did not find obesity to be a predictor of complications or recurrence. Obesity has not been a predictor of complications or recurrence in a similar cohort undergoing primary umbilical hernia repair.[4] The paper published by Hatch et al. provides evidence of excellent recurrent rates in a specialized center performing a high number of pilonidal sinus operations (235 in five years *vs.* 122 in twelve years in our VA population) and the authors should be congratulated for these outcomes. However, extrapolating this data to other patient cohorts should be done with caution. While both our cohort and Hatch et al. had a large representation of obese patients, we characterize our Veteran cohort as a "high-risk" patient population owing to a high burden of medical co-morbidities whereas Hatch et al. appears to draw their "high-risk" population more from surgical history, such as prior incision and drainage or excision. Recurrence in pilonidal disease is also highly variable by follow-up time, with some recurring even over a decade post-procedure.[5] Procedural optimization in pilonidal disease can benefit from more nuanced considerations of the individual patient.

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