

2017 APSNA INNOVATION AWARD SUBMISSION

"Utilizing laser technology for long-term management of pilonidal disease: a midlevel-driven practice."

SUBMITTED BY:

Hajar R. Delshad, MS, PA-C Physician Assistant Department of Surgery Boston Children's Hospital 300 Longwood Avenue, Fegan-3 Boston, MA 02115 Office: (617)355-6915

PROJECT DATES:

March 2014 – present

SUBMISSION DETAILS:

This document is in support of my application for the 2017 Innovation Award given by APSNA.

After multiple years of practice in pediatric surgery, the chronicity, quality of life impacts, and lack of reliable treatment options for pilonidal disease became a source of frustration in our practice. Surgical techniques routinely yielded wound dehiscence or recurrence of disease, both of which hindered teenagers during a delicate time in their social development.

Finding an unmet need at our institution, I partnered with one of our attending surgeons to start the Pilonidal Care Clinic at Boston Children's Hospital. After learning from one of the leading wound care experts, partaking in intensive wound management courses, and reading the current literature -- we launched our program in March of 2014. Our focus on treatment was to avoid surgery unless we could improve outcomes; we began treating all patients conservatively with aggressive shaving and hair removal, hygiene in the form of soaking in water daily, and advanced wound care techniques as needed. Patients did well and were eager to avoid surgery, but had trouble maintaining hair control in the area. A more permanent option was necessary.



SUBMISSION DETAILS, continued:

In reviewing the literature, a few small studies showed some promising results for laser hair removal. We asked our hospital for laser hair removal capability, despite having no training or education in this treatment method. But as surgical professionals, we are often called upon to learn new techniques and use innovative approaches to improve patient outcomes. Our laser was purchased within the first year of our practice. We then widened our program to include a dedicated nurse, coordinated with plastic surgery and our entire multi-disciplinary team took the requisite training classes to be credentialed in laser hair removal.

Since that time, we have treated >160 patients overall and had around 60 patients undergo laser hair removal with minimal to no adverse events and with improvement in symptoms. Every patient enrolled in our clinic is entered into a database for long-term data and survey collection. We ask about recurrences, quality of life, presence of symptoms, and compliance with treatment, as well as tailor the care and routines for the patient and their lifestyle. Patients also have access to our providers so they can start treatment for recurrences/flare-ups quickly, as well as manage patients away at college who struggle with access to healthcare.

The establishment of our Pilonidal Care Clinic has:

- 1. Utilized innovative technology to improve patient care (patients undergoing laser had statistically significant likelihood of resolution of symptoms)
- 2. Established a solid role for surgical nurses and advanced practice clinicians to perform laser epilation as well as see patients independently
- 3. Drastically changed our referral patterns, consolidated patient management, improved patient education and communication for a chronic surgical condition
- 4. Has completely transformed the treatment of pilonidal disease within our institution, greatly reducing the need for surgical resections
- 5. Allowed seamless coordination between disciplines (dermatology, endocrinology, plastic surgery as needed)
- 6. Can be replicated at other institutions either within Departments of Surgery or in cooperation with dermatology.
- 7. Assisted with supporting patients by managing their quality of life and minimizing disease-related disruptions of academic and sports routines.
- 8. Streamlined patient education

Thank you for your consideration for this award. For more information, please visit our website: www.childrenshospital.org/pilonidalcare

