

PROCTOLOGY

neoV Laser case study

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LASER COAGULATION OF PILONIDAL SINUS

Patient Profile and Clinical Examination

A healthy military man, 42-years old and athletic, arrived with a linear pilonidal sinus 8 cm in length. An examination revealed the presence of a small

midline fistulous orifice at a superior aspect of the sinus. While some small pits were visible, no side branches were detected.

Surgical Procedure

In April of 2018, the patient underwent the procedure. No special preparation was required prior to the outpatient surgical procedure, other than shaving the relevant area.

Before general anesthesia, he received 1g of EV Metronidazole. After widening the fistulous orifice with a scalpel, the sinus tract was explored using a metal probe to confirm the limits and to facilitate later laser probe introduction.

Next, a curettage procedure was used to thoroughly clean the sinus tract from debris and hair. A sharp Volkman-spoon was used, followed by flushing the tract with a sterile hydrogen peroxyde solution.

The probe was connected to a 1470nm laser (CORONA FISTULA PROBE, neoLaser, Caesarea Israel). The probe's conical internal fiber emits

a ring-shaped laser illumination which ensures a gentle, uniform application of energy.

The laser (neoV1470, neoLaser, Caesarea Israel) was set to 10 Watts with single 3-second pulse durations. The probe was then pulled back while releasing 3-second laser shots every 3-4 mm of the tract.

The laser shots were repeated at every site until the probe's adherence to the tissue was sensed.

Similar steps were performed to coagulate the superior tract segment. Subsequently, the fistula orifice opening was coagulated with 3-second shots along several directions of the opening to confirm closure and provide postoperative blood control. The total amount of applied energy used during the surgery was 980 Joules, which is only slightly higher than the recommended dosage.

Postoperative care

A simple dressing sufficed to close the fistula orifice. Discharge occurred a day after the surgery without immediate complications. No other complications were reported. No analgesic treatment was necessary postoperatively.

The patient arrived for his follow up at the end of

May 2018, six weeks after the surgery. He was asymptomatic, with no complications. No exudate was present and only a residual dry scar was visible above the fistula orifice.

Conclusions

Laser coagulation of the pilonidal sinus is a new and promising minimally invasive surgical option for treatment of the pilonidal sinus.

The technique is safe, feasible and useful with minimal risk of complications.