



Sinus laser therapy versus sinus lay open in the management of sacrococcygeal pilonidal disease

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Stage	Description
Stage I	Single pit in the midline, no lateral extension
Stage II	>1 pit in the midline, no lateral extension
Stage IIa	2–3 pits in the midline
Stage IIb	>3 pits in the midline
Stage III	Midline pit/pits plus lateral extension in one direction
Stage IV	Midline pit/pits plus lateral extension in both directions
Stage R	Recurrent SPND following any type of treatment

Abbreviation: SPND, sacrococcygeal pilonidal sinus.

Management

- When patients present with acute infection or abscess, definitive treatment is usually **delayed** until the infection has resolved.
- Epilation and hair removal using shaving, waxing, laser and depilatory creams have been associated with improvement in the recurrence rates of SPND .

Non surgical management

- **Injection** of different materials inside the cavity of the sinus has been devised as primary treatment or adjunct therapy with variable degrees of success.
- Liquid and crystallized **phenol** have been used with success rates reaching **95%** .
- **Fibrin glue** has also been used for the treatment of chronic SPND with a success rate of up to **96%** .

Non surgical management

- Thrombin gelatin matrix with a reported success rate exceeding 90% .
- Application of platelet-rich plasma is considered a promising treatment and has been reported to be associated with a recurrence rate of 8.2%

Surgical management

- Is the mainstay of treatment of chronic SPND & includes :
 - Curettage,
 - Lay open
 - Wide excision with closing the defect primarily, with a flap or graft, or leaving the defect open to heal with secondary intention
- Recently, minimally invasive procedures were introduced were associated with promising outcomes and good patient satisfaction.
- These methods include :
 - Endoscopic pilonidal sinus treatment (EPSiT)
 - Sinus laser therapy (SiLaT) with success rates over 90%

Aim

- This study aimed to compare the outcomes of sinus laser therapy (SiLaT) and sinus lay open in the management of SPND

Methods

- Patients with SPND who were treated with SiLaT or lay open were retrospectively reviewed.
- The main outcome measures were the success of surgery in terms of complete healing at 12 months postoperatively, time to complete healing, complications, operation time and quality of life (QoL)

SilaT



SilaT



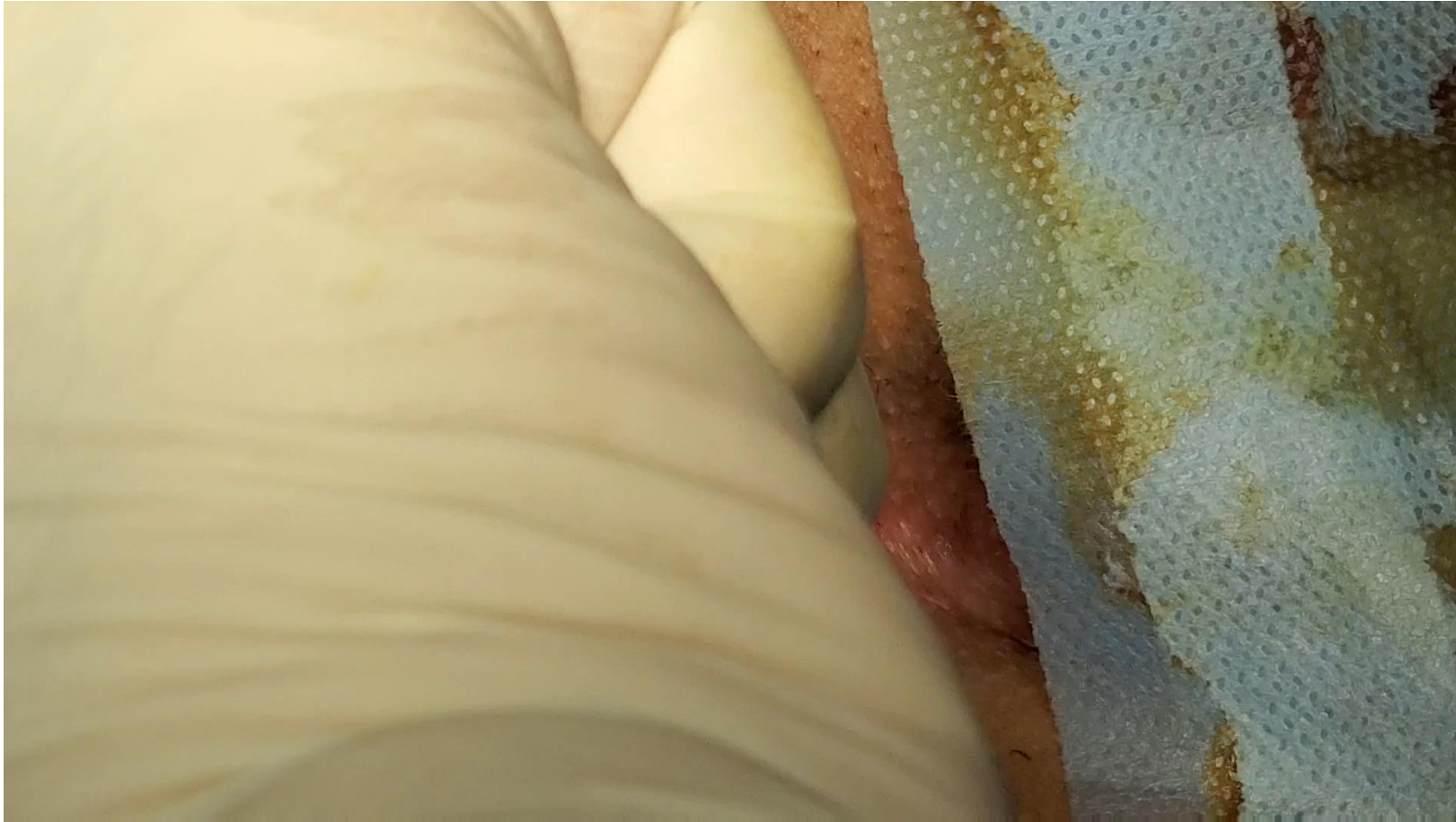
SilaT



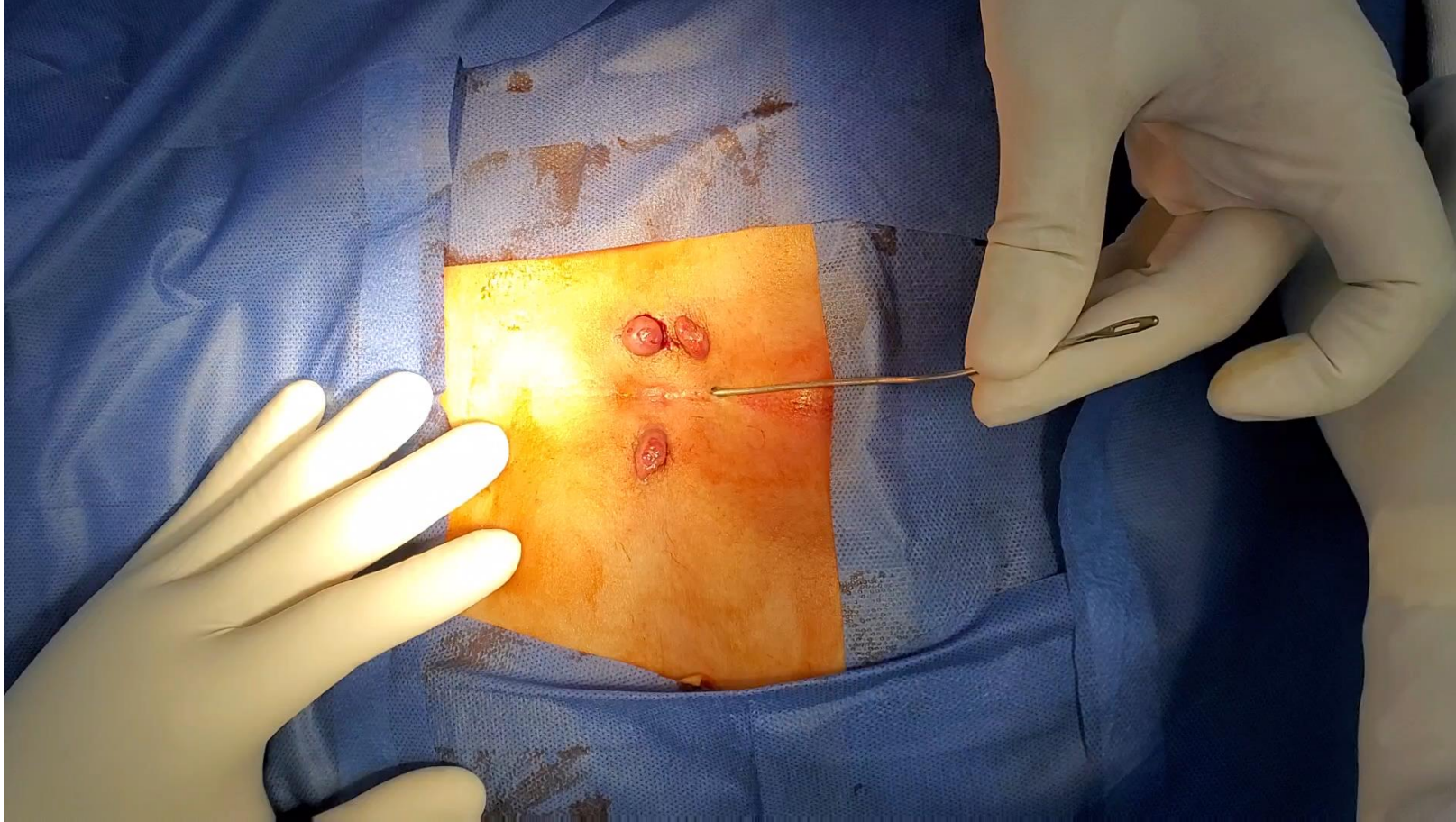
SilaT



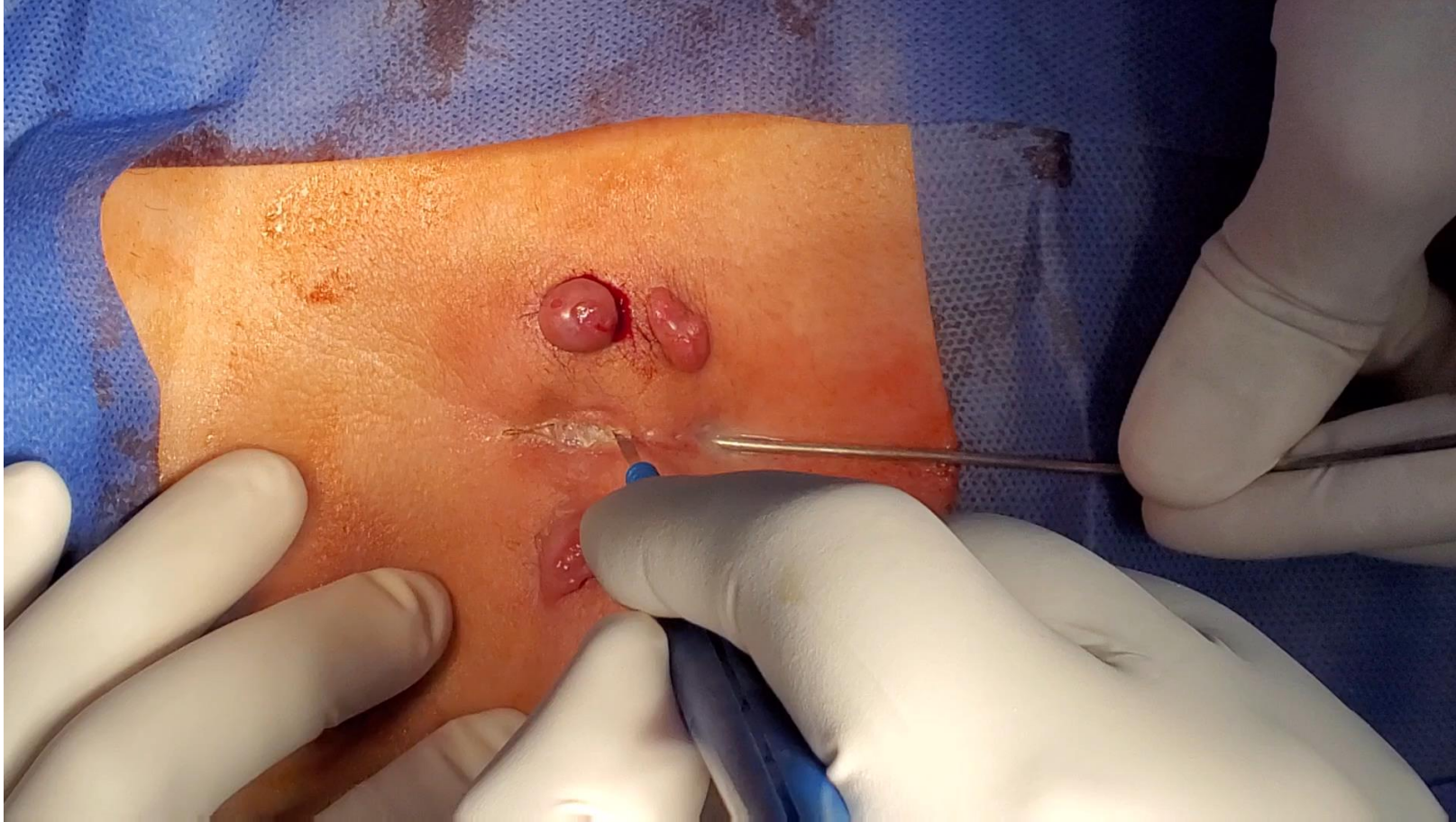
SilaT



Lay Open



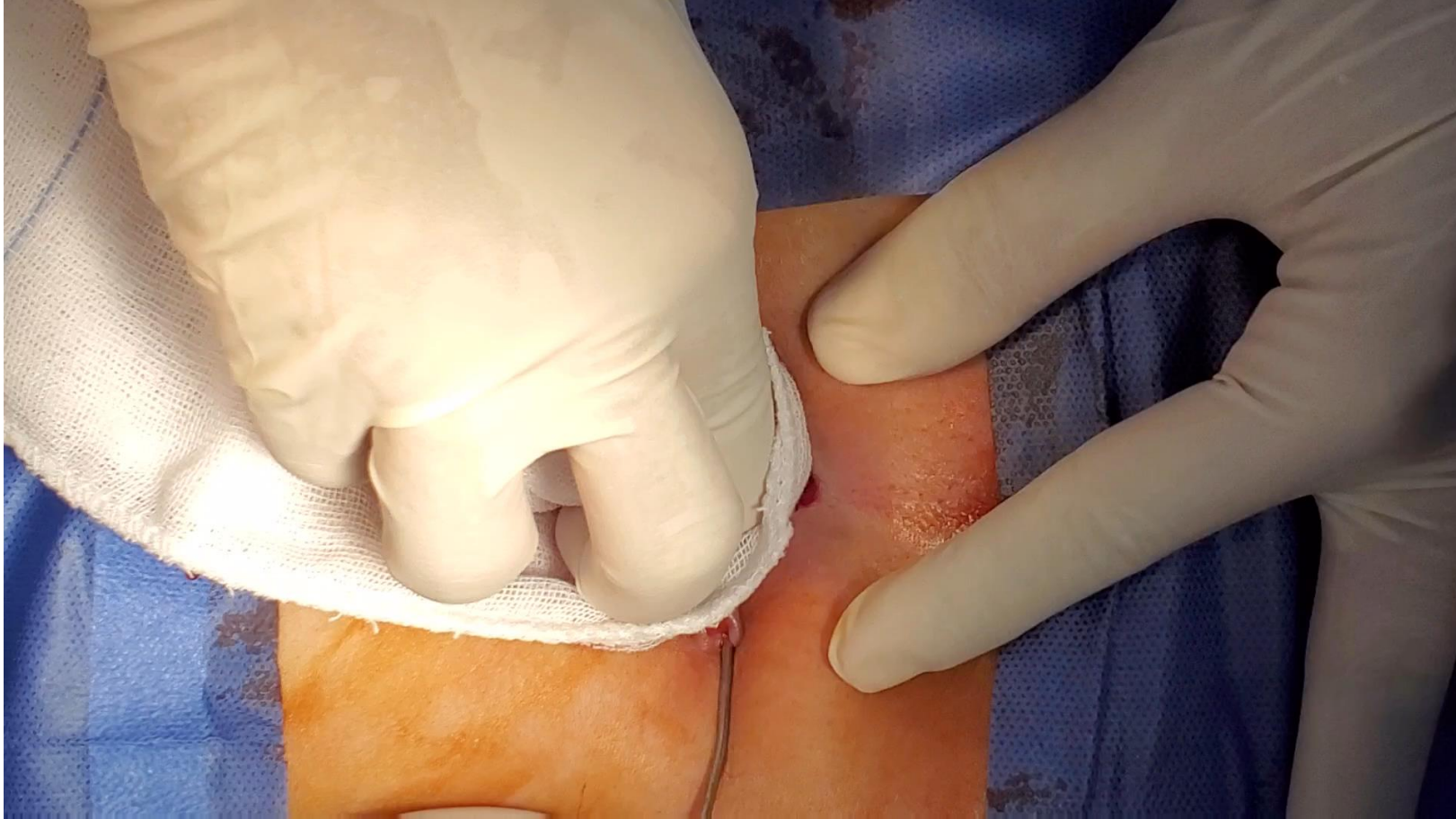
Lay Open



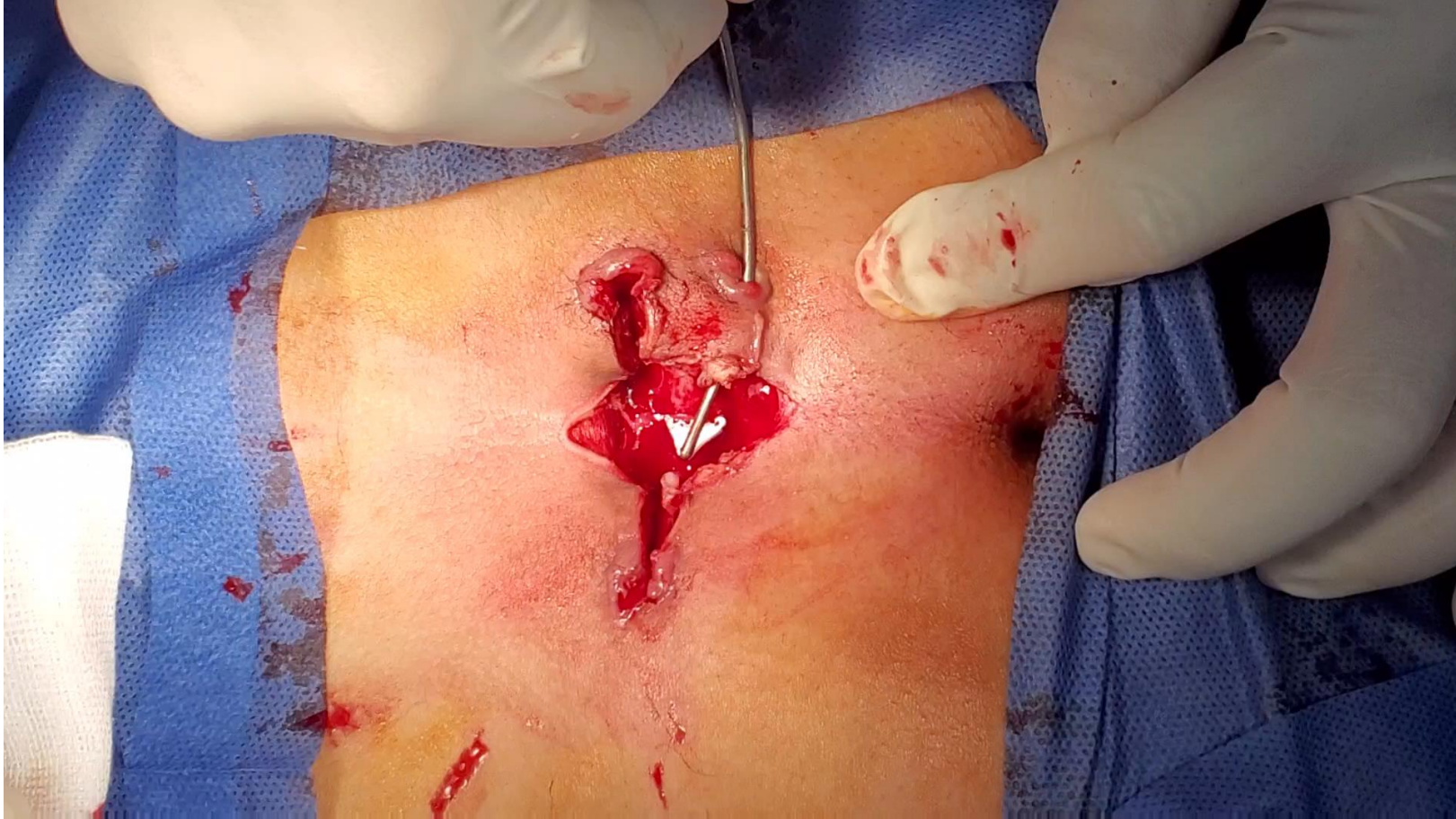
Lay open



Lay open



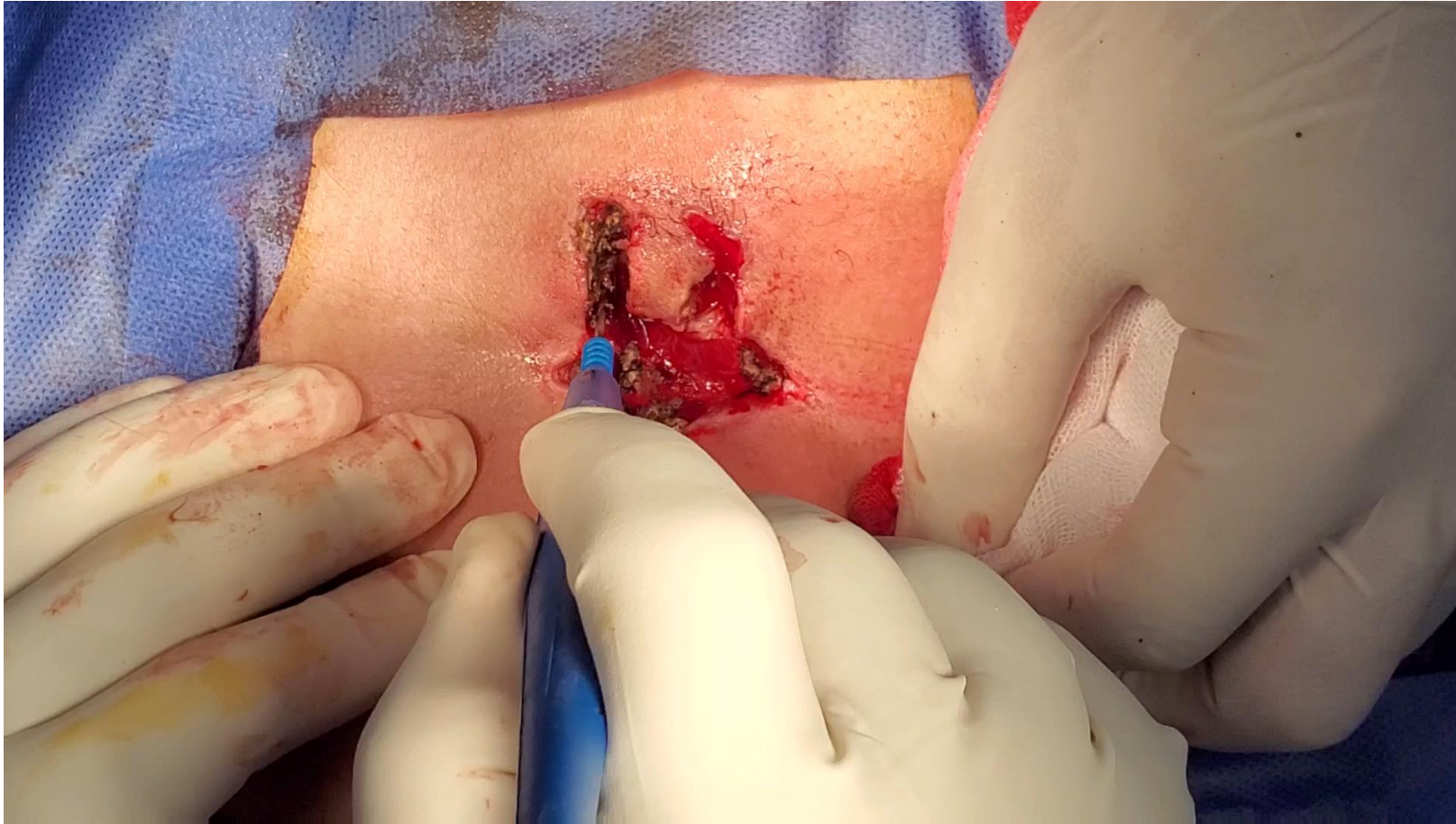
Lay open



Lay open



Lay open

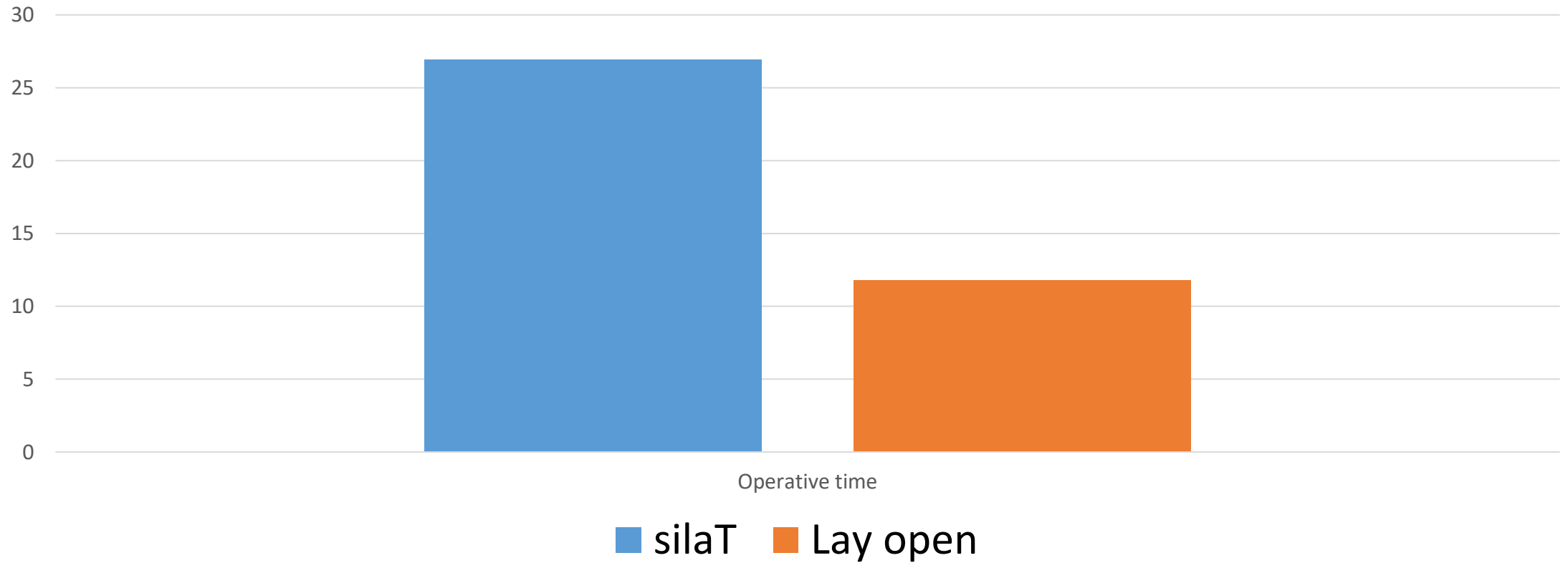


Primary outcome

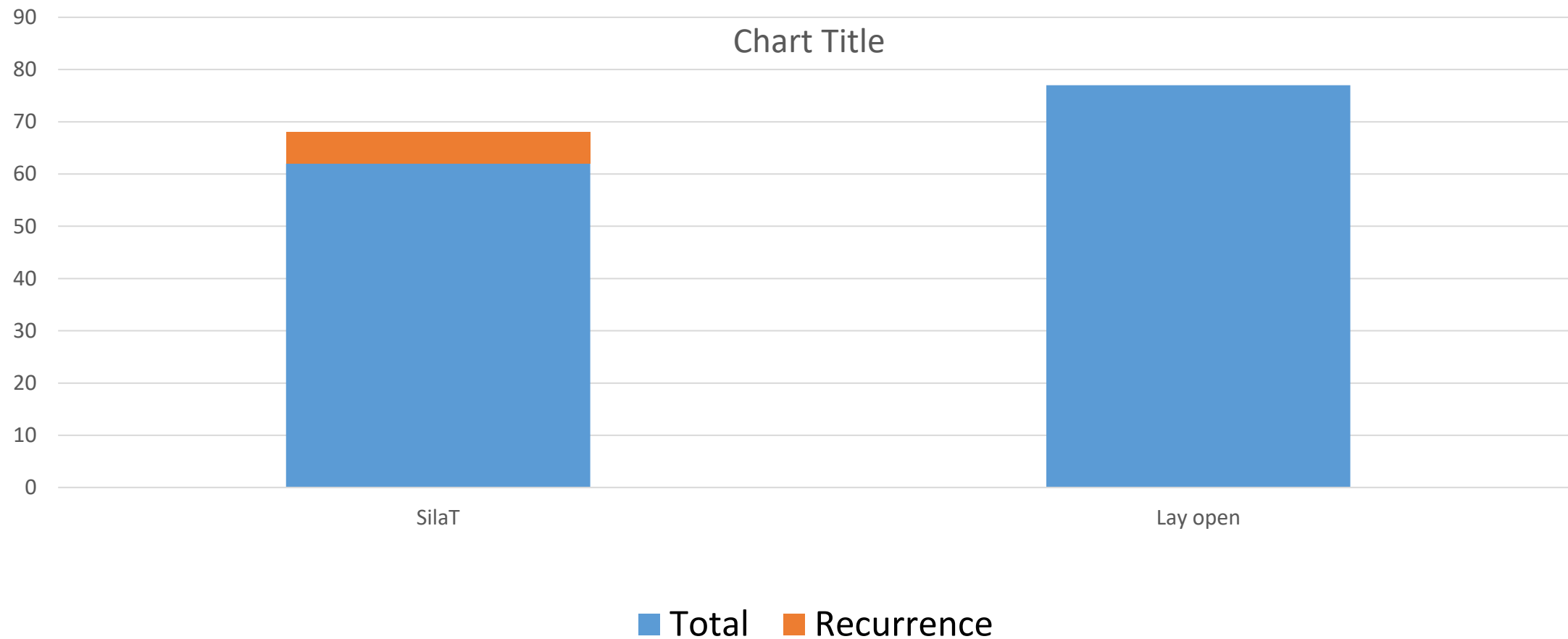
- Complete healing of sinus without recurrence, was recorded in **all patients** in the sinus lay open group and in **56 patients** in the SiLaT group with a statistically significant difference between the two groups in favor of the lay open technique (**100% vs. 90.3%; $P = 0.007$**)

Operative time

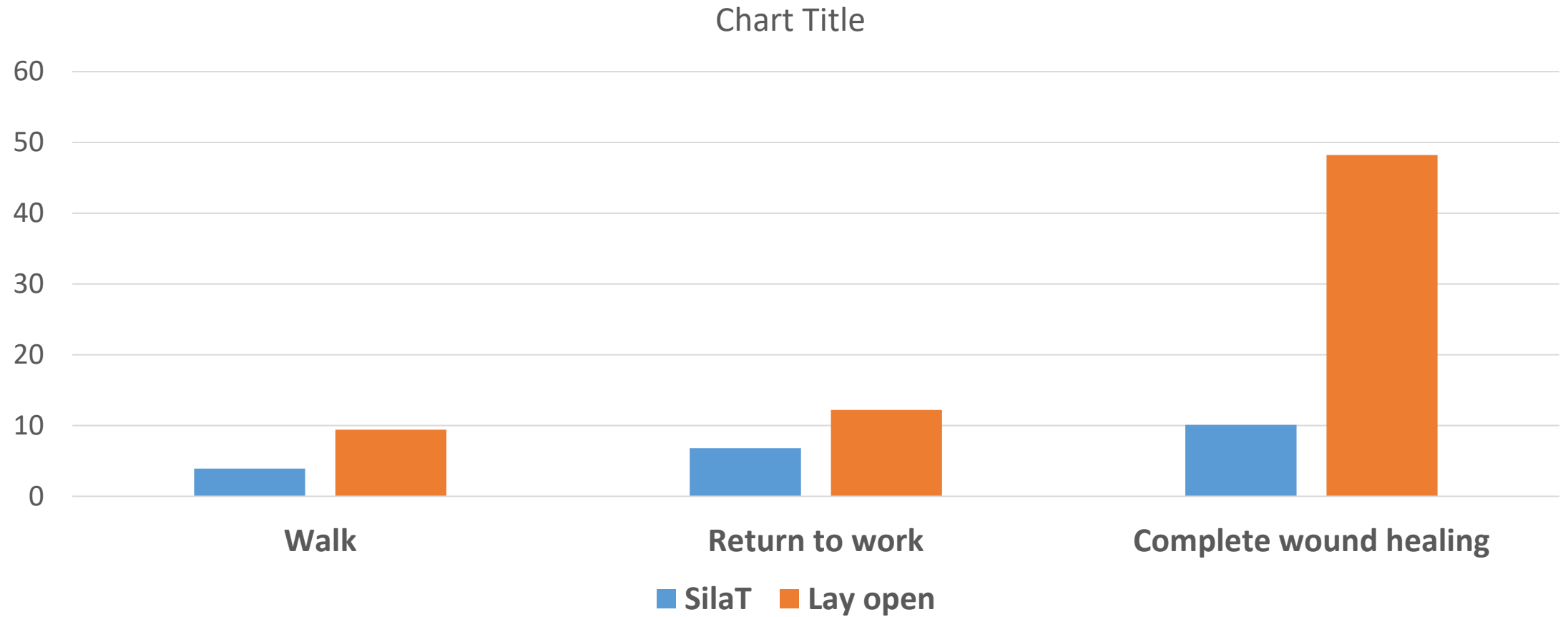
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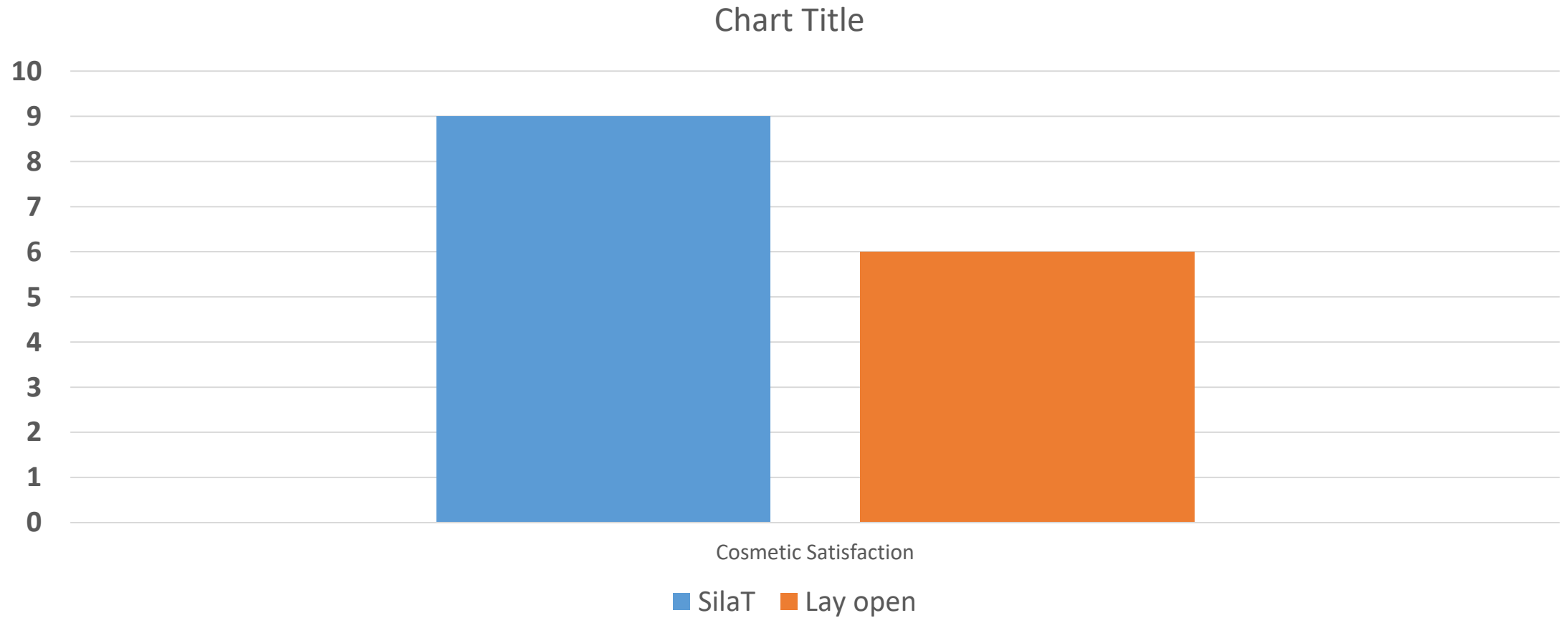
Recurrence



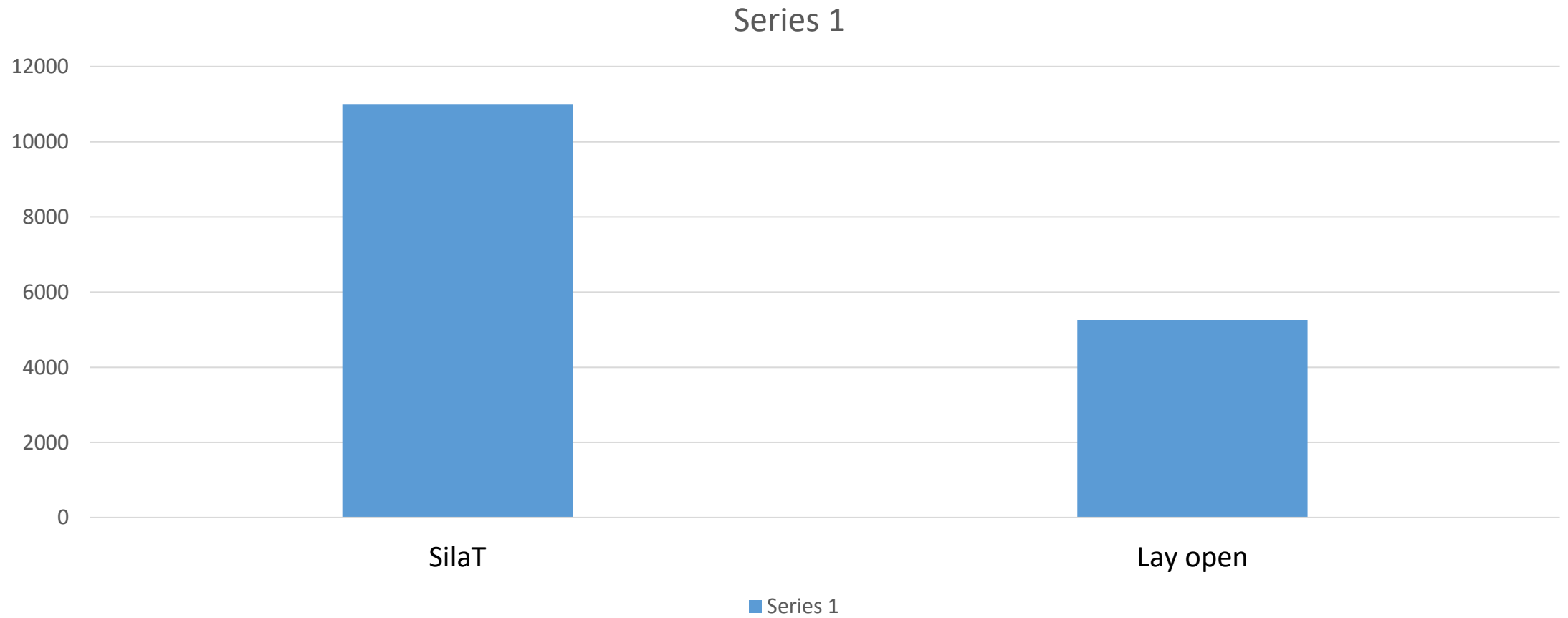
Healing time

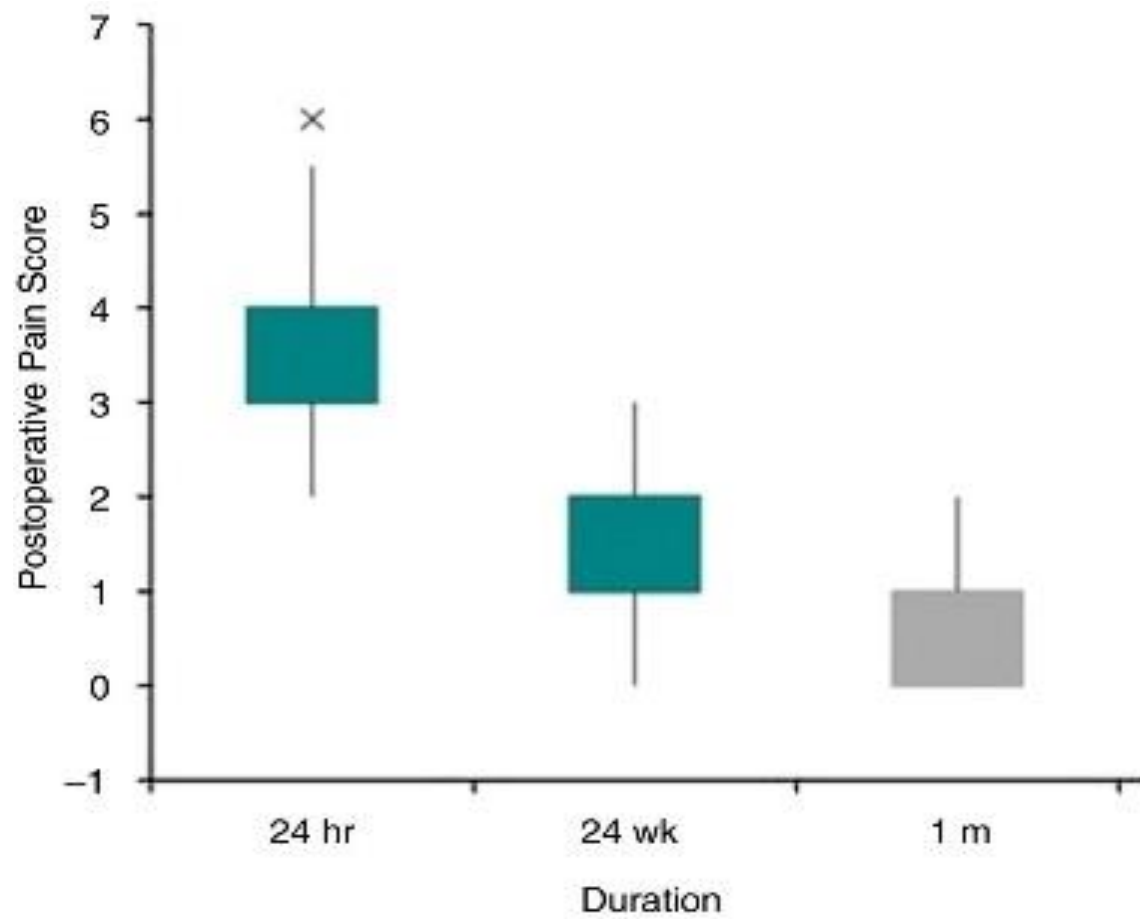


Cosmetic Satisfaction

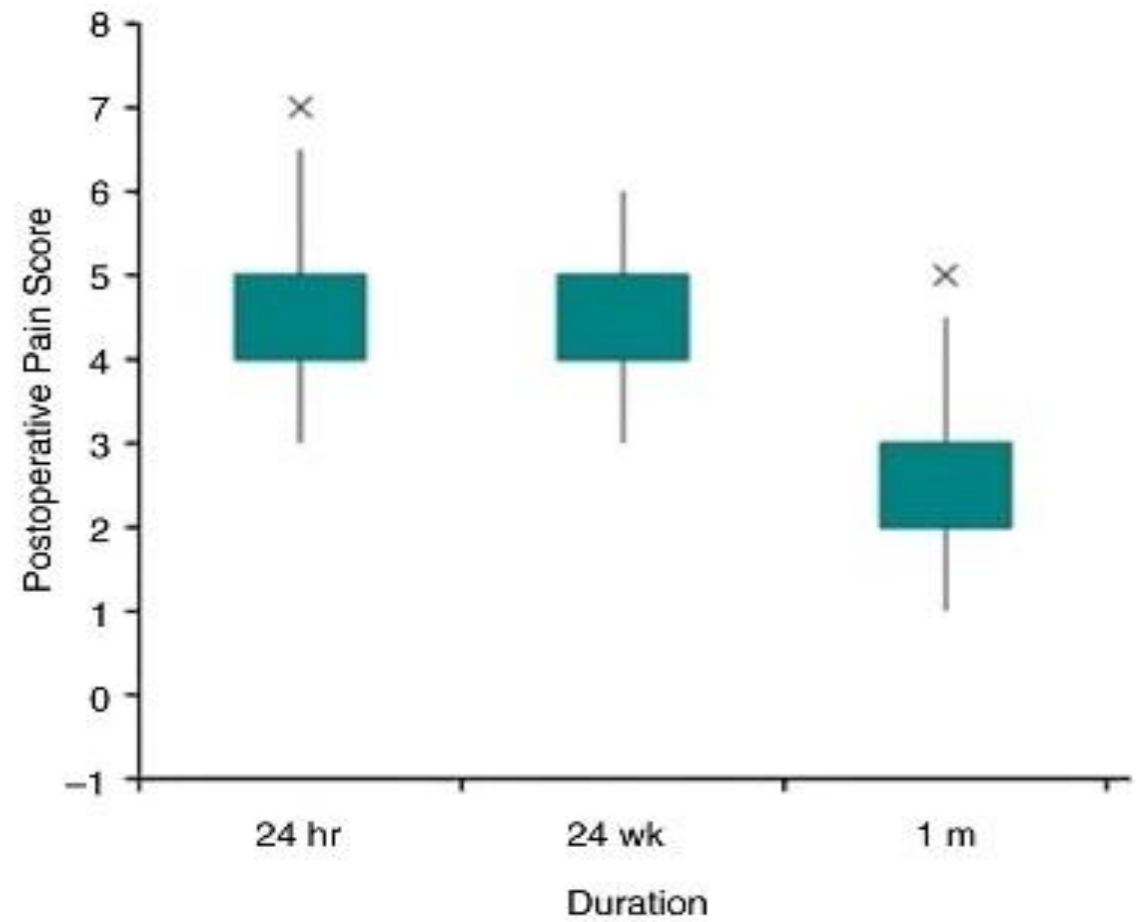


Cost





(A) (SiLaT)




(B) (Lay open)

Postoperative pain assessed using the visual analogue score (VAS): (A) box and whisker plot for postoperative pain after SiLaT; (B) box and whisker plot for postoperative pain after lay open


Take home message

- Sinus **lay open** was associated with better success than **SiLaT**. On the other hand, SiLaT was associated with quicker healing, better cosmesis, better QoL and longer operation time. The complication rate of the two procedures was comparable



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Thank you