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BACKGROUND

- **Gender-affirming phalloplasty** encompasses:
 - phallic shaft creation
 - penile urethroplasty
- **Single stage phalloplasty** combines the two, while **staged phalloplasty** separates them.
- Complications following phalloplasty including urethral stricture/fistula, flap necrosis, and hematoma, have been reported in up to **76.5%** of procedures.

OBJECTIVE

- Understanding the **predictors of 30-day complications** following phalloplasty to improve patient outcomes and clinical decision making.

METHODS

- Retrospective review of the **National Surgical Quality Improvement Program** database **2012-2021** for:
 - transgender men
 - **single** stage and **staged** phalloplasty with phallus creation
 - LOS ≥ 5 days & operating time > 4 hours
- **Primary outcome: incidence of 30-day major & minor postoperative complications.**
- **Secondary outcome: indication for unplanned reoperation.**
- Bivariate analysis and multivariate logistic regression.

Figure 1. Frequency (%) of postoperative major and minor complications following phalloplasty.

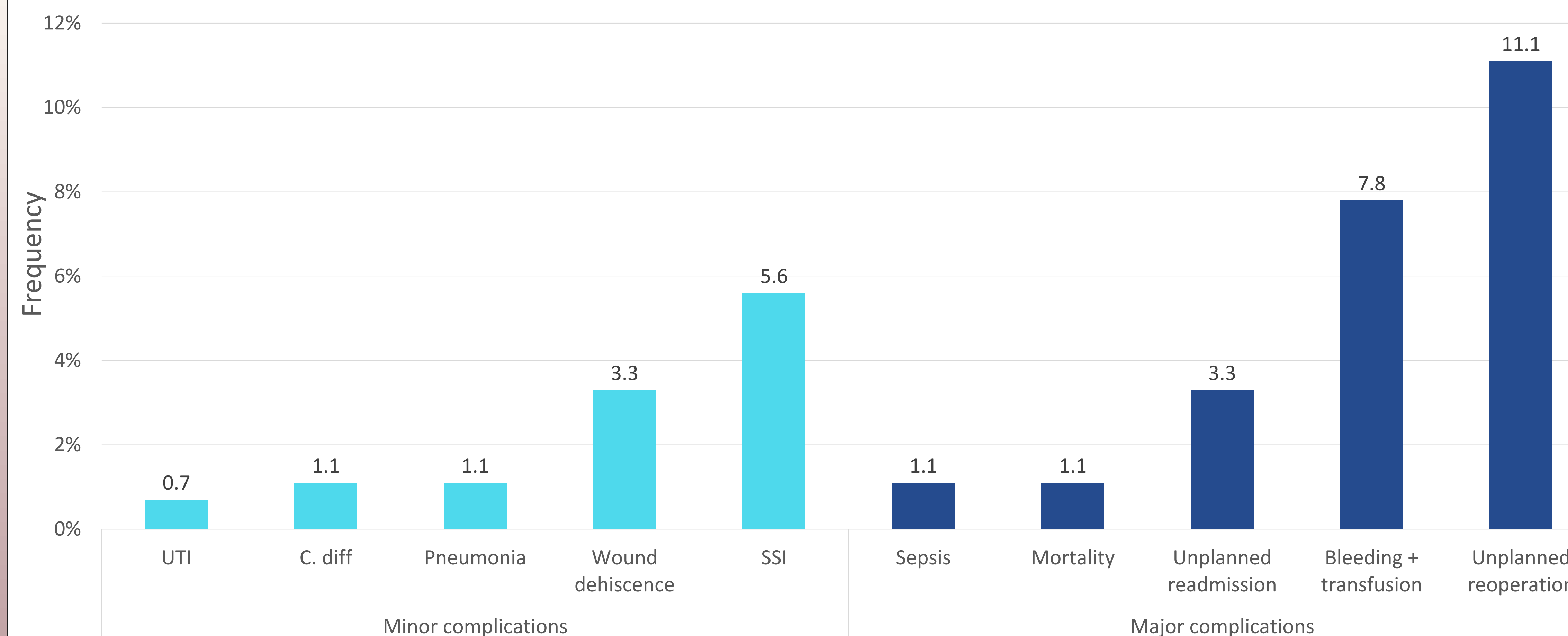
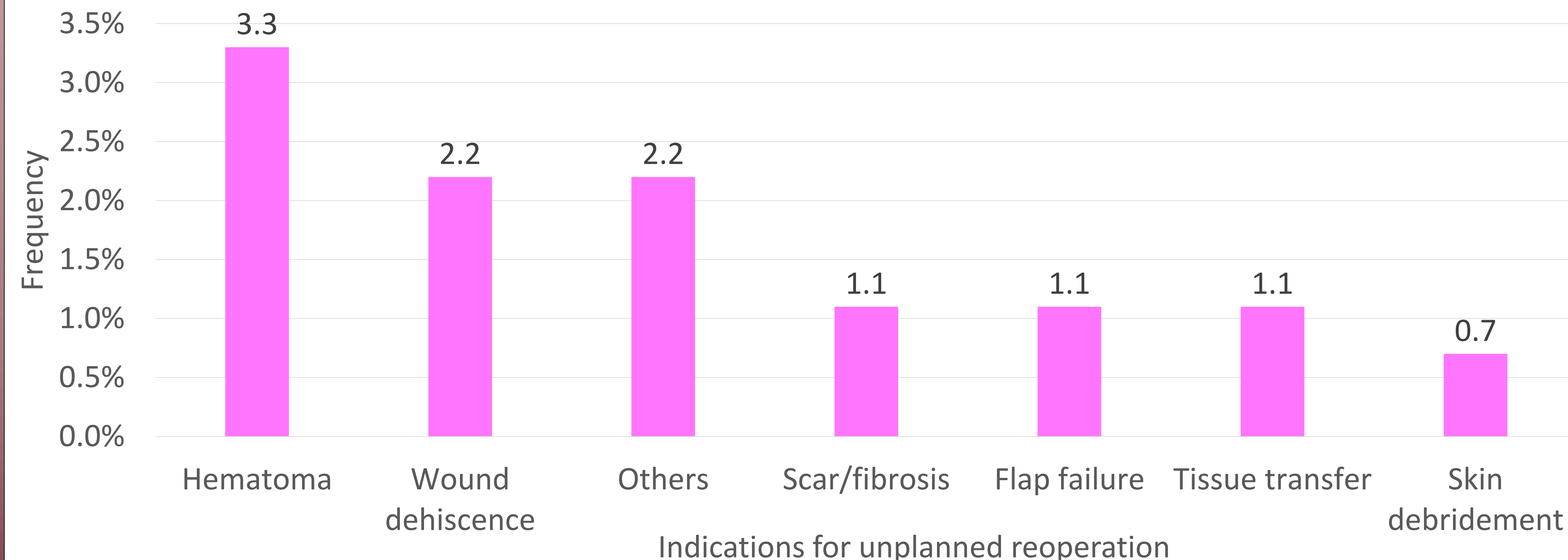


Figure 2. Frequency (%) of indications for unplanned reoperation following phalloplasty.



RESULTS

- **90** patients included:
 - $n=43$ (**47.8%**) single stage
 - $n=47$ (**52.2%**) staged phalloplasty
- $n=18$ (**20.0%**) developed any complication
- Most common complication: **unplanned reoperation** ($n=10$ [11.1%]) (**Figure 1**) due to **hematoma evacuation** ($n=3$, 30.0% of reoperations, 3.3% of all patients) (**Figure 2**).
- Compared to patients without complications, those with **minor** complications ($n=45$ [54.9%], $n=2$ [25.0%]; $P=0.145$) were **less** likely to have had **staged** phalloplasty.
- **Longer operating time** $\rightarrow$ **greater** odds of 30-day **major** complications (aOR [95% CI] 1.01 [1.002-1.018]).
- **Smokers** $\rightarrow$ **123X** the odds of 30-day **minor** complications vs non-smokers (aOR [95%CI] 123.3 [1.4->100.0]).

CONCLUSION

- **20%** overall risk of 30-day complications.
- **Staging:** non-significantly associated with **less** complications.
- **Reducing operating time, smoking cessation** and strict **preoperative nicotine testing** $\rightarrow$ mitigate odds of 30-day postoperative complications.