Assessing the Influence of COVID-19 Positivity Status During the Perioperative Period On Non-Urgent Gastrointestinal Surgery Outcomes

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Background

- With the end of the pandemic, preoperative COVID-19 testing has relaxed, leading to patients undergoing elective surgery while having COVID-19
- Little is known about the impact of COVID positivity status on surgical outcomes when controlling for other preoperative characteristics.

Methods

- ACS-NSQIP 2021 introduced COVID-19 variable
- **(+)** if active COVID diagnosis within **14 days prior to surgery**
- We included the 10 most common **elective** gastrointestinal surgeries
- Compared COVID(+) to COVID(-) patients after propensity-score matching to adjust for possible confounders

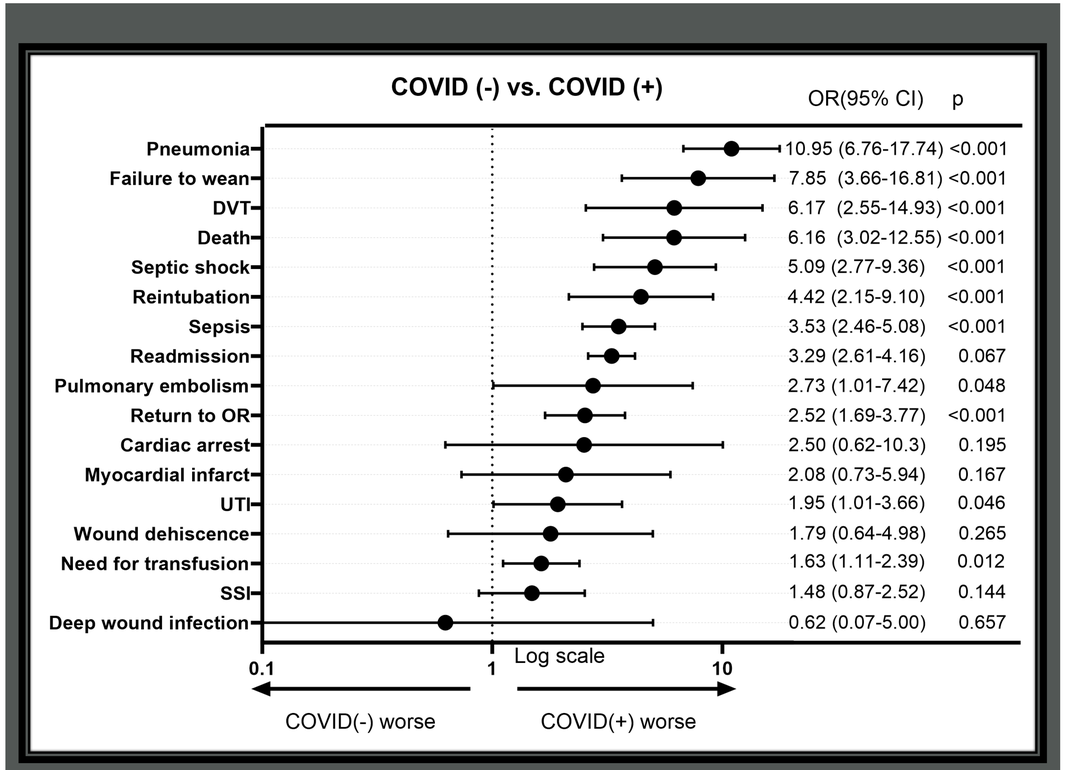


Figure 1. 30-day surgical outcomes by COVID status

Results

	COVID (+) = 932	COVID (-) = 4660	P =
Age	50 (34 – 64)	50 (34 – 64)	0.88
Female	530 (57%)	2682 (57%)	0.72
BMI	29 (25 – 35)	29 (25 – 35)	0.63
Tobacco use	119 (12%)	599 (12%)	0.98
CHF	33 (3%)	161 (3%)	0.97
T2DM	146 (15%)	686 (14%)	0.49
HTN	329 (35%)	1647 (35%)	1.00

- COVID(+) worse surgical outcomes including transfusions, reoperation, readmission and death (Fig. 1)

Discussion

- COVID testing in the preoperative period should still be considered
- Prospective RCTs are needed, accounting for vaccination status

Contact