Supplementary material

Postoperative outcomes in surgical COVID-19 patients – a multicenter cohort study

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Table S1. Surgical specialties

Variables	Category	Symptomatic (n=26)	Asymptomatic (n=18)	Suspected (n=18)	Recovered (n=18)
Type of surgery	Major	9 (35%)	7 (39%)	5 (28%)	4 (22%)
	Minor	17 (65%)	11 (61%)	13 (72%)	14 (78%)
Type of major surgical specialty	Abdominal	3 (12%)	2 (11%)	4 (22%)	2 (11%)
	Neurosurgery	5 (19%)	5 (28%)	0 (0%)	1 (6%)
	Thoracic	0 (0%)	0 (0%)	1 (6%)	1 (6%)
	Vascular	1 (4%)	0 (0%)	0 (0%)	0 (0%)
Type of minor surgical specialty	ENT	6 (23%)	0 (0%)	2 (11%)	3 (17%)
	Obstetrics	4 (15%)	4 (22%)	1 (6%)	0 (0%)
	Orthopedic (excl. spinal)	2 (8%)	4 (22%)	4 (22%)	4 (22%)
	Other	0 (0%)	0 (0%)	0 (0%)	1 (6%)
	Peripheral vascular	2 (8%)	0 (0%)	0 (0%)	0 (0%)
	Plastic surgery	0 (0%)	1 (6%)	2 (11%)	2 (11%)
	Urogenital	3 (12%)	2 (11%)	4 (22%)	4 (22%)

Table S2. Overall patients' characteristics

Variables	Suspected (n = 18)	Recovered (n = 18)
Demographics		
Age	51.4 (28.5)	60.7 (17.6)
Sex (female)	8 (44%)	10 (56%)
Comorbidities		
Diabetes	3 (17%)	5 (28%)
Hypertension	7 (39%)	9 (50%)
COVID-19 symptoms and treatment at surgery		
Days since positive test or clinical diagnosis[1]	1 [0, 1]	23 [43, 46]
Cough	4 (22%)	1 (6%)
Dyspnea	3 (17%)	2 (11%)
Respiratory distress	2 (11%)	1 (6%)
Fever	7 (39%)	2 (11%)
Antibiotics	8 (44%)	3 (17%)
Steroids	5 (28%)	0 (0%)
Preoperative respiratory and organ dysfunction		
Oxygen	7 (39%)	2 (11%)
Invasive respiratory support	3 (17%)	2 (11%)
SOFA score[2]	3 [0, 7]	1 [0, 2]
Surgical characteristics		
General anesthesia	13 (72%)	11 (61%)
Urgency[3]	15 (83%)	6 (33%)
Major surgery	5 (28%)	4 (22%)
Blood loss[4]	225 [150, 475]	300 [100, 1500]

Data is reported as mean (SD), as median [q1, q3] or as number of events (proportion in %).

[1] Positive test for patients who had recovered and clinical suspected diagnosis for suspected patients.

[2] When no bilirubin was measured preoperatively, we imputated a value of 0 for the liver component of the SOFA score. 2 missing values in "suspected" and 1 missing value in "who had recovered" subgroup.

[3] Urgency was defined by the need to undergo a surgery within 24 hours.

[4] 10 missing values in suspected patients and 8 in patients who had recovered.

N.B. BMI is not reported because of excessive missing values.

Abbreviations: BMI = body mass index, SOFA = Sequential Organ Function Assessment score

Table S3. Patients' complications up to 30 days after surgery

Variables	Suspected (n = 18)	Recovered (n = 18)
Complications		
Pulmonary complications	6 (33%)	1 (6%)
Infectious complications (non-pulmonary)	3 (17%)	2 (11%)
AKI[1]	5 (28%)	0 (0%)
Thromboembolic complications	3 (17%)	0 (0%)
Resource utilization		
New ICU admissions	9 (50%)	5 (28%)
Hospital length of stay	10 [3, 22]	3 [0, 16]
Mechanical ventilation free days (at 30 days)	27.0 (4.1)	29.3 (1.6)
Organ dysfunction free days (at 30 days)	20.4 (11.5)	28.7 (3.9)
Mortality		
30-day mortality	3 (16.7%)	1 (5.6%)
Kaplan-Meir survival probability[2]	0.83 [0.68, 1.00]	0.94 [0.84, 1.00]

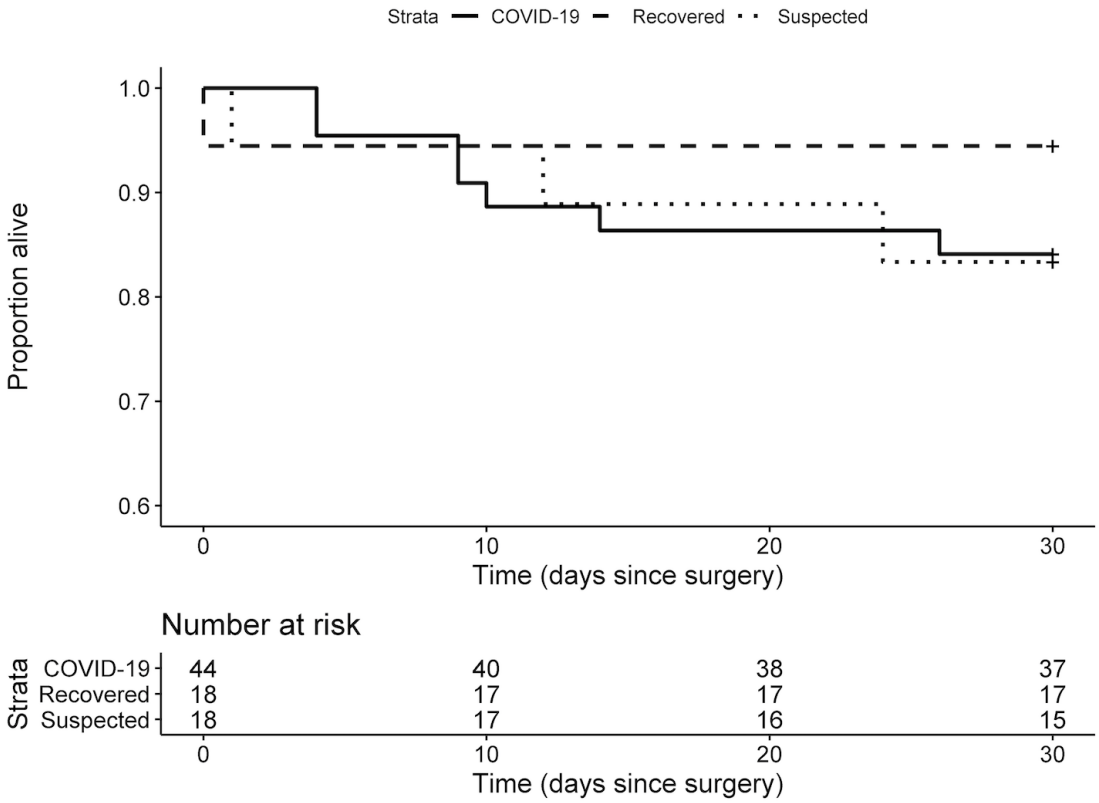
Data is reported as mean (SD), as median [q1, q3] or as number of events (proportion in %).

[1] 3 patients required renal replacement therapy in the suspected group.

[2] 30-day survival probability from the estimated Kaplan-Meir survival function, expressed with 95% confidence intervals.

Abbreviations: AKI = acute kidney injury, ICU = intensive care unit

Figure S1. Kaplan-Meier curves of COVID-19, suspected and recovered patients.



P = 0.554 by log-rank test

List of participating centres:

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