

COVID-19 Testing in Asymptomatic Patients Undergoing Elective Surgery

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COVID-19 Testing in Asymptomatic Patients Undergoing Elective Surgery

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Background

- COVID-19 testing in asymptomatic patients remains controversial and has created issues with respect to capacity and turn-around time.
- Delays in turn-around time have forced cases to be cancelled which in turn, has created surgeon and patient dissatisfaction.
- Data suggests that testing may be beneficial for patients undergoing major operative procedures as, if they are COVID positive, there is a potential for worse outcome.
- Data suggests that in patient undergoing aerosolizing procedure that viral particles can remain in rooms for several hours if air flow is not adequate and thus risk exposure patients following. This risk is minimized in OR's where air flow is adequate.

Methods

Researching risk factors for asymptomatic and symptomatic COVID infected surgery patients.



Evaluate the necessity for asymptomatic patients to be tested prior to elective surgery

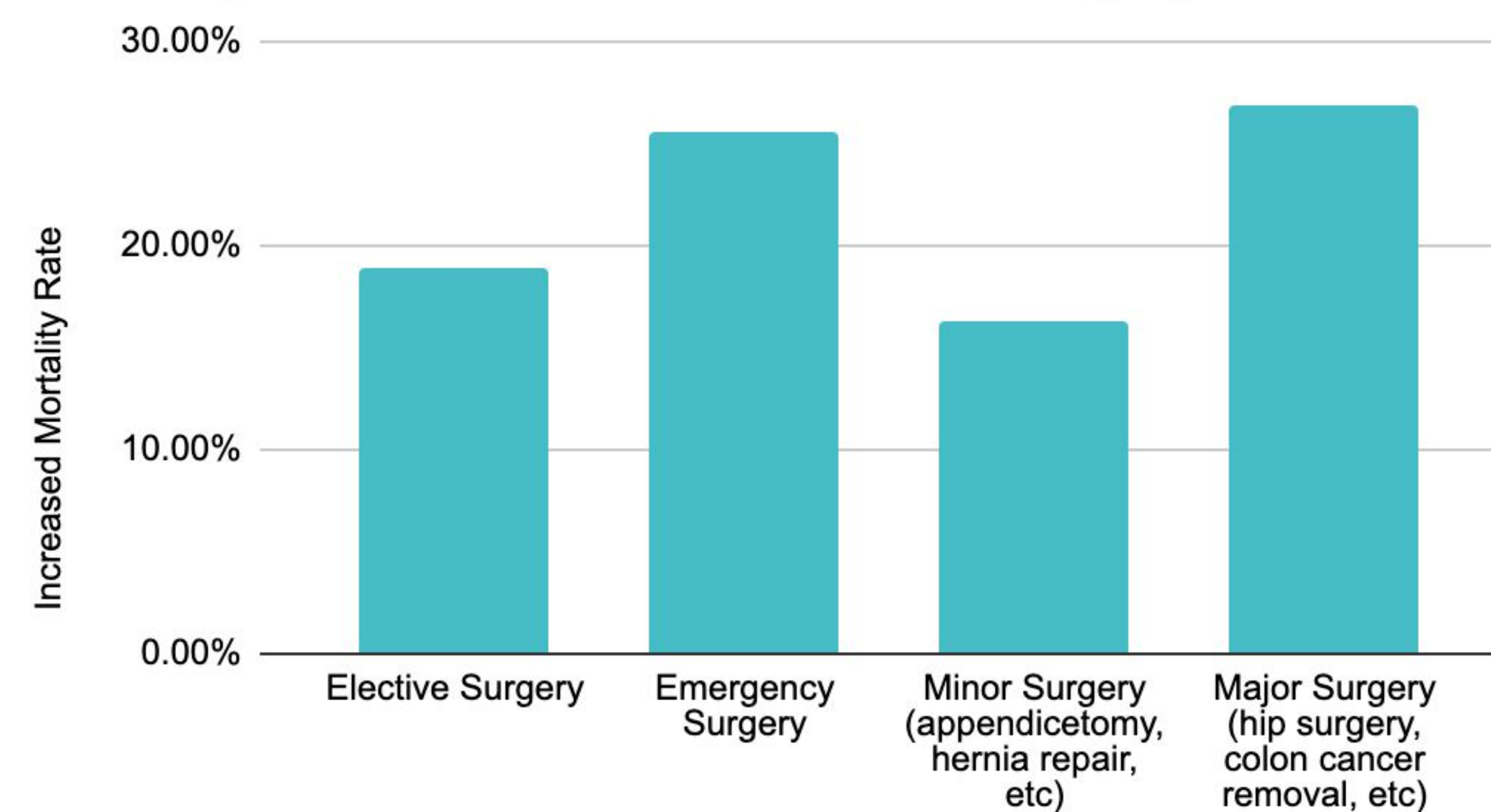


Compare other health network's workflow for pre-procedural testing to LVHN and qualitatively assess need for adjustment

Data

- A retrospective study on a sample of 34 asymptomatic COVID-19 patients who developed symptoms after elective surgery between Jan. 1-Feb. 5 2020 in China showed the following results
 - 44.1% required ICU care post surgery
 - 20% patient mortality rate
- The University of Birmingham published a study spanning across Europe and found that COVID infected patients experienced substantially worse postoperative outcomes than normal.
 - Showed a 23.8% overall 30-day mortality rate
 - Mortality rates in minor and elective surgeries typically are > 1%

Mortality Rate of COVID-19 Infected Surgery Patients



- At LVHN, the COVID positivity for asymptomatic patients undergoing testing is under 0.3%.
- At LVHN, there have been no patients that have developed COVID infections after elective surgery.

Discussion

- Testing of asymptomatic patients varies across institutions
 - Stanford Hospital requires that testing be performed within 3 days of the planned procedure and that patients self-quarantine for the time between the test and the procedure.
 - Chester County Hospital that testing be performed within 2 days of the planned procedure and the self-quarantine.
 - Other facilities have extended times for pre-procedural testing and some do not require testing at all for certain procedures.
- LVHN requires testing 3 days prior to any aerosolizing procedure. There is consideration to eliminate testing for patients undergoing ambulatory procedures.

Future Direction

- Recommendations will continue to change based on new data and the evolution of COVID-19.
- Infectivity rates vary from community to community and it is essential that these rates be followed as they may force changes in recommendations.
- Essential to any plan is effective education and communication.

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