

ADDENDUM P

Bronchoscopy Algorithm During COVID-19

Created: April 4, 2020

Procedures to be triaged according to NMC guidelines: <https://www.nebraskamed.com/for-providers/covid19>

Identify Case Classification

- A. Life/limb at risk – should be done now
- B. Time dependent outcome necessitating procedure within 24 hours - short delays acceptable
- C. Can wait 4-8 weeks or longer without substantial change in outcome – reschedule
- D. Can wait greater than 8 weeks without substantial change in outcome – postpone

Inpatient Bronchoscopy – Class B (rarely A)

- Disposable bronchoscope in the ICU when possible with appropriate PPE of N95, faceshield, gown and gloves or (PAPR if available); please see COVID-19 procedure listed **below**.
- PFT lab / RT to assist with setup of bronchoscopy
- If endoscopy suite utilized, patient to have COVID-19 testing prior to bronchoscopy

Outpatient Bronchoscopy

Lung Transplants

- **Class B** for “indication” in transplant (e.g. loss of function)
- **Class C** for surveillance (these bronchoscopies have been cancelled)

Diagnostic and Therapeutic Bronchoscopy (including EBUS and other advanced modalities)

- Airway involvement with current or impending loss of function would be **Class A-B**
- Suspected Stage III/IV malignancy – **Class B-C**
- Suspected Stage I/II malignancy – **Class C** – will be re-evaluated for later procedure

For necessary outpatient bronchoscopy:

- Patient will be scheduled for bronchoscopy after COVID-19 clinical symptom screening (either during clinic consultation or via phone)
- COVID-19 testing to be performed within 48-72 hours prior to scheduled bronchoscopy

Current PPE precautions will be employed during the case based on NMC guidelines:

<https://www.nebraskamed.com/for-providers/covid19>

COVID-19+ ICU Bronchoscopy:

Bronchoscopy generally be avoided in COVID-19 positive patients; risk-benefit and the additional information anticipated from bronchoscopy needs to be discussed with the multidisciplinary team prior to proceeding. Bronchoscopy may be considered on intubated patients where less invasive modalities have been unsuccessful or deemed to be less beneficial.

Goal: Bronchoscopy should generally be avoided unless absolutely necessary. Consider if tracheal aspirate may be adequate for sample acquisition to reduce AGP risk. Second, mini-BAL preferred over traditional bronchoscopy.

Prioritization of testing:

1) Tracheal aspirate – first choice. we recognize that there may be discordance between tracheal aspirates and deeper LRT specimens. However, if positive for SARS-CoV-2 or other pathogen we would favor this as an adequate sample to assess for secondary pathogens.

2) Mini-BAL – second choice test. To minimize aerosols, please consider pre-sedation to minimize cough and aerosolization potential.

3) Bronchoscopy as last resort with the exception of other indication such as mucus plug. If indicated, bronchoscopy recommendations include:

A) Negative pressure room

B) PPE with N95 or (PAPR if available), faceshield, gloves, gown.

C) Patient must be intubated in ICU to minimize aerosolization

D) Increased sedation, lidocaine, +/- use of paralytic for the procedure (no BIS needed) for complete prevention of cough

Requested testing on specimens: in addition to usual infectious work-up, consider CAP Biofire panel available via microbiology lab (order not yet in Epic). Page Paul Fey 888-5626 for the CAP Biofire panel and he will report results to you verbally. Of note, cell count/diff not available due to inability to safely process.