



Identifying COVID-19 in Pregnancy

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Problem: Asymptomatic COVID-19

- Labor and delivery units at particular risk
 - Large volumes of patients and visitors
 - Relatively young and healthy patients
 - Care requires frequent and close contact
 - Possibility of unanticipated emergency surgery
 - Newborns and pediatric providers

Problem: Asymptomatic COVID-19

- Symptom-based screening has low sensitivity
- Early NY experience with universal screening shows high proportion of asymptomatic positives
 - ~14% of all asx admissions tested positive; 88% of all positive test results (D Sutton et al, NEJM 2020)
 - Asymptomatic patients comprised 66% of all positive tests (w Vintzileos et al, AJOG 2020)
- Last week's town hall: 57% respondents had adopted universal testing on L&D

Local context

- Supply chain issues
- Long turn-around times for routine testing
- Finite supply of PPE
- Limited rapid testing

BIDMC OB Context

- Diverse practice settings:
 - Faculty practices (on site and community)
 - Community health centers
 - Chelsea
 - Bowdoin
 - Dimock
 - Fenway
 - South Cove
 - Private groups
- Tertiary maternal hospital for BILH system

Stepwise solutions

- Limited visitors (“one healthy support person”)
- Universal masking of patients and support persons
- Universal special flu droplet precautions (mask + eye protection) = routine precautions
- Alternatives to SARS-CoV-2 PCR?
- Lowering thresholds for testing in patients nearing term or in advance of scheduled admission
- Testing all symptomatic patients
- Targeted rapid testing
- Centralized management for COVID-19

Solutions: Alternative to PCR?

- Lymphopenia associated with COVID-19
- Pilot: universal CBC with WBC differentials on admissions (April 1-14 2020, ~200 admissions)
- Tested all asymptomatic patients with lymphopenia

Solutions: Targeted rapid testing

- Intrapartum and postpartum fevers
 - Rationale:
 - Intrapartum management
 - Postpartum site of care
 - Newborn precautions

Lessons learned

- Dedicated team is helpful!
- Operationalizing testing prior to scheduled admissions (inductions and c-sections)
 - Develop workflows with scheduling
 - Testing availability/sites continue to expand
- Ensuring equity in testing
 - Walk-up testing
 - Expanding testing locations: Chelsea, Bowdoin, Dimock

Future directions

- Universal rapid testing?
- Testing of support persons?