Laparoscopy and COVID

• Concern for Aerosolization of Viral Particles During Laparoscopy
  “The data referenced was on the detection of other viruses in surgical smoke. While no data exists on COVID-19 in this regard, assuming that this virus shares those properties would lead to the approach showing the most abundance of caution.” SAGES

• Emergent/Urgent Laparoscopic Cases:
  • Appendicitis
    “Appendectomy for acute appendicitis (depending on institutional resources outpatient or short stay should be considered for uncomplicated appendicitis in order to maintain hospital beds; depending on available resources patients with complicated appendicitis should receive parenteral antibiotics and percutaneous drainage if an abscess is present)” ACS
  • Pyloric Stenosis (consider open technique)
Options:

• Test all pre-op patients (risk of false negative test)
• Perform Open Procedure
• Use non-operative treatment (appendicitis)
• Use Filtration System during Laparoscopy
  • Conmed Airseal device with Smoke Evac
  • Lexion Insufflow device with Smoke Evac

• Airseal Smoke Evac filters particles as small as 0.01microns
• COVID particles 0.12 microns (0.06-0.14 microns)
Laparoscopic Case in COVID suspicious or positive patient

- Use Airseal Device with Smoke Evacuation system
  - Can be attached to 5, 8, 12mm ports
  - Cannot be used with 4mm ports

- Other Option is Lexion Insufflow with Smoke Evac System
  - Staff not as familiar with this product
  - More cumbersome, more parts
  - Advantage - heats/humidifies pneumo, prevents desiccation
  - Disadvantage – no system in place for evacuation of pneumo
Approved for Children >20kg
Steps of Procedure

• Partial Nursing/OR staff in-serviced; if agree will have all Nursing/OR staff in-serviced
• See Modules emailed out
Technique for final desufflation and disposal of pneumo

• When nearing end of procedure, decrease pressure to low (5mmHg)
• When finished, remove working ports (visualization)
• Place obturator back through Insufflation trocar
• Turn insufflation to OFF – this circulates pneumo back into filter – said to remove approx. 90% of pneumo
• Suction out remaining pneumo or attach insufflation port to included secondary tubing and attach to suction canister