Short Communication

Association of Gynecological Endoscopy Surgeons of Nigeria (AGES) Advisory on Laparoscopic and Hysteroscopic Procedures during the COVID-19 Pandemic

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AGES COVID-19 Recommendation Review Committee

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ABSTRACT

Coronavirus 2, or SARS-CoV-2 disease (COVID-19) is a global public health concern. Although there is a paucity of evidence to advise on the best practice, we recommend postponement of elective gynecological endoscopic surgeries until the pandemic is contained. Emergency surgeries should preferably be done through open surgeries than laparoscopy or hysteroscopy approach. However, if or when laparoscopy or hysteroscopy is considered, health personnel in theatre must wear appropriate personal protective equipment (PPE) and all standard precautions should be observed to prevent COVID-19 infection. When COVID-19 is highly suspected or confirmed, the patient should be referred to centers equipped in taking care of such cases.

KEYWORDS: *AGES, Coronavirus, COVID-19, gynecology, hysteroscopy, laparoscopy, pandemic*

INTRODUCTION

Coronavirus 2, or SARS-CoV-2 disease (COVID-19) is a global public health concern that was declared as a pandemic by WHO due to the large number of infected people worldwide. The disease first emerged in December 2019, when a mysterious illness was reported in Wuhan, China.[1-3] The most common symptoms of the disease include fever, cough, and fatigue.[4–7] Others are headaches, hemoptysis, diarrhea, rhinorrhea, sneezing, sore throat, and dyspnea.[4-7] Pneumonia a hallmark of the disease causes acute lung injury (ALI) and acute respiratory distress syndrome (ARDS) which leads to pulmonary failure and death.[6,7]

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Currently, there are no specific treatments or vaccines against COVID-19 infection.[8] Hospitals, healthcare workers, and supplies all over the world are stretched to the limits in combating the dreaded coronavirus.

Advantages of gynecological endoscopy surgery

Laparoscopic and hysteroscopic surgeries are associated with lower morbidities, fewer effects on the immune system, shorter hospital stays, early ambulation, return

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to work, and normal activities that are beneficial to the patient and the hospital system in general.

The procedures can be done as elective or emergency surgeries. Gynecological emergency laparoscopic surgeries are used for the evaluation of acute abdominal pain and the treatment of many common acute abdominal disorders.[9] These include, but not limited to, ectopic pregnancy, ovarian cyst torsion, tubo-ovarian masses, and endometriosis.

Risk of COVID-19 in laparoscopic and hysteroscopic surgery

There are concerns with possible increased risk of COVID-19 transmission to healthcare workers during laparoscopic and hysteroscopic procedures. This is probably due to the formation of COVID-19 contaminated aerosols during surgery, especially during intubation and from the effect of the gases used during pneumoperitoneum i.e. potential contaminants may be from CO2 leakage, creation of smoke from energy devices, and splashing of contaminated body fluids from the pressurized uterine cavity during hysteroscopy. Currently, there is a paucity of evidence upon which to base clinical practice and guidelines. However, the joint Royal College of Obstetricians and Gynecologists (RCOG) and British Society for Gynecological Endoscopy (BSGE) and the American Association of Gynecologic Laparoscopists (AAGL) recommendations were that all theatre staff should use personal protective equipment (PPE) during all operations under general anesthesia whether by laparoscopy or laparotomy,[10] and infection control practices should be followed according to local and national protocols. Nonsurgical methods of treatment should be recommended to reduce the risk of COVID-19 transmission to healthcare workers.[10]

Role of ages

As an association with members engaging in gynecological endoscopy surgery with perceived increased transmission of the coronavirus via aerosols, we need to have a common goal in combating this disease most especially when we are practicing in a low-resource setting with various challenges including constraints of getting PPE and respirator masks, state of the art theatre environment to prevent the disease among others as well as scarcity in getting a patient tested to confirm her status before surgery.

Recommendations

Despite the paucity of evidence upon which to base clinical practice, members are advised to follow these recommendations:

1. During the preoperative preparation, look out for the risk factors for COVID 19 infection like recent travel to an endemic area or signs and symptoms of the infection. You could also ensure the COVID-19 test is done wherever possible when the clinical criteria are met. For the clinical criteria see the screening criteria for suspected COVID-19 cases in the "Handbook of COVID-19 Prevention and Treatment."[11]
2. Postpone all elective gynecological endoscopy surgeries for now especially when there is no threat to life.
3. If it is considered necessary to perform laparoscopic surgery in non-emergency cases, this should be performed only by a very experienced endo surgeon and if possible should be delayed for 14 days in suspected cases until tested. However, if the procedure is an emergency proceed with open surgery where there is no experienced laparoscopy surgeon available.
4. All patients for surgery are to be managed as if they are positive for COVID-19 until tested. Use of PPE including FFP3 or N95 respirator, long-sleeved gown, elbow-length gloves, and eye shield/protection is recommended. Minimal staff should be in the theatre to prevent transmission of the virus.
5. Members/practitioners are advised to use open surgery over laparoscopic surgery during this pandemic. This is because open surgery has an assumed lower risk of disseminating aerosol of COVID-19 and spreading the virus to patients and staff compared to laparoscopic or hysteroscopic surgeries. Minimal or none use of electrosurgery in the open surgery is recommended to eliminate surgical smoke.
6. Intraoperatively, the risks of transmission are high with intubation, CO2 insufflation, explosive dispersion of body fluids when removing trocars and retrieving specimens per abdomen or vagina. There are also high risks of the effluent of aerosols and droplets during hysteroscopy because of uterine distension. Hence, use appropriate full recommended preventive clothing for COVID-19 and also avoid explosive dispersion of body fluids during laparoscopic hysterectomy and evacuate surgical smoke using suction or smoke extraction unit in emergency surgeries.
7. Postoperative care can be managed via phone calls or telemedicine.
8. Confirmed cases of COVID-19 should be referred to centers that are well-equipped to take care of such cases.

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Conflicts of interest

There are no conflicts of interest.

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