

Scope of endoscopy in Covid-19 era

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The small little virus changed our life's overnight .In December 2019, the first case of pneumonia of unknown origin was detected in WUHAN, CHINA, and a new Corona virus, SARS COV 2, was extracted from the lower respiratory tract sample of several patients.

It changed our world upside down and the entire world was shut down. Doctors were the worst affected, as we need to care for our patients as well our staff, family and ourselves.

The virus being transmitted through respiratory droplets & close contact, the aerosol generating procedures like the Laparoscopic surgeries were the risk for exposure putting the doctor and the team at risk.

So, there was a temporary stoppage of all the aerosol generating procedures until we could have some clear guidelines. However, once we started understanding the virus and its spread, slowly endoscopy procedures started opening up with clear indications, guidelines, safety protocols.

Why were these procedures considered risky, It's because, one needs to give General Anesthesia for these surgeries, and general anesthesia means intubating the patient which would bring out the virus and expose the entire surgical team to infection.

But, if one does open surgery, the procedure can be done under Spinal anesthesia and hence there is no intubation required. Apart from the anesthesia issues, during Laparoscopic procedure we depend on the carbon dioxide gas as distension medium.

This gas needs to be evacuated on and off during the procedure while we are utilizing the electrocautery to cauterize (burn)

the tissue to control the blood loss. This surgical plume has been found to be containing the virus, though not proved.

In laparoscopic surgery we need to depend on technology for effective performance of the surgery. So electrosurgery cannot be avoided. This was another problem.

But in Open surgery, the usage of these electrosurgery would be relatively less, though cannot be avoided. But the major advantage with laparoscopic surgery is, the surgery is done in a contained environment unlike open surgery which is totally an exposed surgery.

Having understood these are the problems which could pose problems during laparoscopic surgery, the Professional bodies came out with clear guidelines to be followed during laparoscopic surgery like, Use of PPE & N 95 mask & face shield , proper donning and doffing techniques by the entire team , Use of a Intubation Box during the surgery , so that while intubating the patient for General Anesthesia, the surgical team does not get exposed to the virus.

During the procedure it has been advised to keep the pressure low and not to let out the gas. The use of Smoke evacuator has also been advised and incorporated to prevent the gas leaking during surgery. Certain techniques in surgeries were also modified as an extra precaution.

But the bottom line is , all these can be done only after screening the patient for Covid 19 and if found negative , we can proceed with the surgery .If a patient was found positive for Covid 19 , then it is better to defer the surgery for a month .But if the situation warrants an emergency surgery, then open surgery in designated covid center is suggested .

Apart from Laparoscopy, Hysteroscopic procedures can also pose some risk when electrosurgery is being utilized, General anesthesia is used, Fluid coming out from the cavity is not managed properly. So, one needs to follow all the precautions mentioned during laparoscopy for hysteroscopy as well.

So, with all these clear guidelines set by various professional bodies we are able to perform Laparoscopic & Hysteroscopic Surgeries during the pandemic with caution.

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