Precautions to Be Taken by The Surgeons During COVID-19 Era

Kanupreet Dhiman¹ and Imneet Gill²

Keywords: COVID-19; Surgeons; Preventive measures.

Introduction

The whole world is going through the unusual phase since the COVID-19 pandemic. Lives of many people upended due to this unpredictable infectious virus. It has spread in the whole world like fire in the woods. The Virus has disturbed the human life in all aspects especially the healthcare. Hospital visits specifically outpatient clinics and other surgical practices came to standstill.

Healthcare workers were the ones who were in the high risk of infection due to the community spread. It was the serious issue as they are coming in contact of numerous patients in a day.

Many healthcare workers globally got infected from this virus who were treating the COVID infected patients. Shortage of personal protective equipment and knowledge about it has brought the frontline workers in the list of infected patients. Numerous cases of the infected surgeons emerged from the Operation theatres and Cath labs.

The aim of this article is to provide the recommendations to the hospital staff, surgeons, doctors and patients too before they go for the intensive surgeries. Various protocols and guidelines were issued by the World Health Organization to combat the transmission of this deadly disease.

Management of the outpatient clinics

Most hospitals have to delay or reduce nonurgent outpatient visits as part of their COVID-19 containment strategy. Surgeons should prioritize the urgent life-threatening outpatient visits. Patients should be interrogated for non-urgent outpatient visits via phone calls, skype or other online platforms to reduce the contact. Suspected patients should be given private rooms and separate team should be assigned for the treatment. Patients having symptoms like fever, cough, shortness of breath should call the hospital before arriving so that necessary arrangements can be made for their visit.

Relevant questions like recent travel history of patient as well as family members, contact history should be collected before examination. Screening of patients should be done before coming in
the hospital premises is highly recommended to test for COVID-19 among all patients before being admitted in the hospital for the surgery. Some patients may be highly contagious with mild or no symptoms. They must be isolated immediately and must be reported to the infection control department of the country.

**Preventive Measures to be taken by the healthcare workers**

1. Provided with limited supply of personal protective equipment, surgeons, anesthesiologists, nurses are under the high risk of getting infected. Healthcare workers must take preventive measures in the operation theatre as well as during diagnosis depending on the risk level associated with patients. Alternatives of PPE should be there in case of limited supply.

2. When entering the ward or low risk areas, the surgeons must be in proper personal protective equipment. They must cover their head with disposable caps, disposable gloves, N95 masks, disposable gowns and foot covers. Apart from this for a long procedure they must use an air-purifying respirator. They must avoid contact with the surroundings.

3. When entering the ward or carrying out rounds in the areas of suspected patients the surgeons must be proper personal protective equipment. They must cover their head with disposable caps, two layers of gloves, N95 masks, disposable gowns and foot covers.

Apart from this for a long procedure they must use an air-purifying respirator. They must avoid contact with the surroundings.

For special procedures related to the pulmonary diseases such as collecting airway samples, airway care, and sputum suction, tertiary protection measures like disposable surgical cap, N95 mask, work uniform, disposable medical protective uniform, disposable latex gloves, full-face respiratory protective devices) should be implemented.

Surgeons and other healthcare workers must take care while taking off and wearing the personal protective gears as they were present in the contaminated area. There are high chances of the transmission.

**Management during surgery**

1. All the objects that came in contact with the patients including the blood samples, secretions must be discarded carefully.

2. To reduce the hazards the operation theatres must be fumigated and sterilized immediately after the procedure. Electro-surgical instruments must be used at low power as they contain the surgical smoke. There aren’t any evidences that surgical smoke can cause the infection but it is always good to take measures.

3. Surgeons should be careful with the stick needles and stabs while performing surgeries.

4. All PPE’s that are used in the isolated area must be removed there only. Surgeons and nurses

should wear fresh PPE’s before moving to another ward or treating another patient.

Strict management measures must be taken in the operation theatres to cease the air-borne transmission of the virus.

Conclusion

With the increasing number of COVID infected patients it’s the need of hour to strictly take the preventive measures. The Infection Control board of every nation should work actively to cease the transmission of this deadly virus. These guidelines and preventive measures are important for both patients as well as healthcare workers. There are various risk factors that are associated with the transmission of the corona virus. Management of the surgical department must assess the risk factors associated with the patients depending on the risk level.

References