

Review Article

Surgeon's Dilemma during COVID-19

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The coronavirus disease 2019 (COVID-19) pandemic has brought about unprecedented adaptations in healthcare management, be it at a local or global level. Surgeons are facing a lot of dilemmas in the ongoing pandemic regarding the practice. On one side there are compulsions to manage the surgical patients without any hesitation in the operation theatre, there is another side of surgeons where he must return back home safely without self getting infected with the virus. Till the curve flattens, its going to be a surgical challenge and a herculean task for the surgeons at large to fight the COVID-19.

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The Doctor's Dilemma' is a play by George Bernard Shaw, which was first staged in 1906 and highlighted doctor's dilemmas created by scarce medical resources in a different context. The ongoing outbreak of novel corona virus [COVID-19] has created a global crisis of unprecedented dimensions. It is wreaking havoc across healthcare services and has crashed economies across the globe. It has disrupted human society on a scale that most living people have never witnessed. Surgeons are witnessing a lot of unprecedented dilemmas in the surgical practice due to this pandemic.

Dilemma in Surgical Practice :

The private clinics of surgeons which continue to provide services are often viewed as opportunists and have to face the resistance from society. In contrast, if the private clinics stop their services, they are viewed as cowards by the society and non-compliant by the government agencies. Surgeons are facing an exceedingly difficult task providing outpatient and inpatient services. During the COVID-19 pandemic, face-to-face outpatient appointments are avoided wherever possible and this is causing a communication gap and trust deficit between surgeon and the patient.

Dilemma due to Shortage of Personal Protective Equipment :

Shortage of Personal Protective Equipment (PPE) is another problem for the surgeons. There are emerging reports of medical staff complaining and protesting about the paucity of protective equipment. If the problem is not addressed at the earliest, such discontent may adversely impact our fight right at the frontline. Few hospitals provide N95 masks and PPE only to the chief surgeon and ordinary mask and normal OT dress to the rest in the operating team. Such biased attitude makes everyone vulnerable to COVID-19.

Dilemma due to Lack of Test :

As of June 1, 2020, India had conducted approximately 3.8

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Editor's Comment :

- Surgeons are facing a challenging time during COVID-19.
- They must not only choose the fittest candidate for surgery during this pandemic, but they have to keep themselves fit too to face the challenge.
- There are several dilemmas which each surgeon are facing in their career

million tests since it began testing in February, but many experts have noted that testing capacity is still drastically insufficient for the needs of the population¹. Daily COVID-19 tests per 1,000 people are only 0.08 in India compared with 1.16 in the United States and 1.02 in Italy. Lack of test facilities make surgeon highly at risk when dealing with any emergency Surgery or Oncosurgery during this pandemic.

Dilemma in Laparoscopy :

In our opinion there is no reason to abandon laparoscopic surgery over open surgery. But all the literature warns to not underestimate the risks and perform laparoscopic surgery on COVID-19 positive patients only when really necessary and use logical and common sense to protect the surgeon and others by performing surgery in a safe and protected environment. During laparoscopy smoke and aerosols are generated, not only for cauterization of blood vessels, but also for dissection. This smoke can contain viral DNA and/or RNA and is sometimes evacuated straight into the over-pressured Operating room by opening a valve on a trocar².

Dilemma in Wearing PPE :

A pulse survey of 675 GPs has revealed that one in four have seen Covid-19 patients face-to-face without PPE, while more than half feel unsafe as a result of the lack of PPE. The very act of donning PPE with a N95 mask and face shield, operating in conditions where the surgeon feels hot, suffocated and dehydrated, with fogged inadequate vision, always with a niggles that such uncomfortable circumstances may lead to a major surgical error, all adds to the extreme stress that a surgeon faces in these times³.

Dilemma of Postoperative Course :

Surgeons are also stressed during surgery due to the findings of a retrospective cohort study of 34 operative patients with confirmed COVID-19, 44.1% of patients required ICU care in the post-

operative period and the mortality rate was 20.5%⁴. Even after taking informed consent and prognosticating all the postoperative catastrophes which might happen to the patient party, there is always a fear psychosis in the back of the mind of every surgeon entering the operation theatre in this pandemic.

Dilemma of Choosing Surgical Patients :

As the elective surgeries are now stopped, surgeons have been asked to prioritize surgery that are both medically necessary and time sensitive to perform. Although no surgeon likes cancelling surgery, the necessity to choose which operation to proceed with and which can wait is an unusual circumstance for most of the surgeons. Another unique surgical challenge is the personal risk from intraoperative infection during prioritization of who receives the limited available surgical care. The backlog of postponed surgical procedures is another headache for the surgeons⁵.

Dilemma of Getting Burn Out :

Doctors and health care workers are putting in long hours at work but don't have proper quarantine facilities near hospitals. Health care professionals are responding with an astounding display of selflessness, caring for patients despite the risk of profound personal harm. There is a risk of burn out of the surgeons with the daily routine of performing long hours of surgery wearing the PPE. There is also the tension of daily rigorous donning and doffing of PPE and going home at the end of the day safely and virus free to not infect the family members. Tectonic shifts are at work as hospitals and clinics suffer grave financial losses and the workforce is diminished by illness and exhaustion. In a cross sectional study from China involving 1257 health care workers in China during the coronavirus pandemic, 50.4% had symptoms of depression, 34.0% reported insomnia, 44.6% reported symptoms of anxiety and 71.5% reported distress⁶.

Dilemma of Work or Death for Surgeons :

Reading about intensive care admission or death of doctors due to COVID-19 regularly on print media and social media brings about certain fear psychosis among all the surgeons. The biggest thing happening is uncertainty of what is going to happen in quarantine and the social distance from family and friends. Also, there is a strong fear of stigma as people feel they will face social ostracism from the community.

Dilemma of Increasing Cost versus Facing Blame:

Surgical expenses in the hospital is going to rise due to the cost of PPE, the expenses of COVID-19 tests, the cost of special sterilization of the operation theatre and for maintaining the social distancing and due to less workforce. All these expenses are to be borne by the patients in a Corporate Hospital and Surgeons may be facing the blame for the expenses. There is an apprehension of overcharging or overuse of personal protective equipment.

Dilemma of Chemoprophylaxis :

Surgeons also are facing the dilemma of chemoprophylaxis with hydroxychloroquine on a regular basis without a clear guideline

from the regulating authorities. Although pre clinical results are promising, to date there is a dearth of evidence to support the efficacy of hydroxychloroquine in preventing COVID-19⁷. Surgical community is at present confused about the role of chemoprophylaxis in this pandemic due to conflicting report emerging daily.

Dilemma in Resuming Elective Surgery :

There is confusion regarding when the elective surgery can be resumed as the cases of COVID -19 cases are rising daily everywhere. There should be a sustained reduction in rate of new COVID-19 cases in the relevant geographic area for at least 14 days before resumption of elective surgical procedures and the resumption should be authorized by the appropriate Municipal or State Health Authorities. This makes everything uncertain and unpredictable for the surgeons.

Limitation to study :

The article only concerns principally the dilemmas of the general surgeons which they are facing in performing their duties daily during COVID-19. The other super speciality Surgical Departments must be having some other surgical dilemmas specific to their speciality but has been kept out of purview of this study.

Conclusion :

"Life does not cease to be funny when people die any more than it ceases to be serious when people laugh."

— George Bernard Shaw, *The Doctor's Dilemma*

The most challenging field during the COVID-19 pandemic is surgery. Surgeons are facing a lot of dilemmas in the line of duty but still fighting the pandemic head on till now. A lot of support and encouragement is required from the masses, administration, hospital authorities and all quarter of society so that the surgeon can deliver till the curve is flattened without getting physically or mentally fatigued. With no clear picture emerging still about when the COVID -19 will be brought under control, the surgeon must wait and struggle with pandemic till the light at the end of the tunnel is seen.

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