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Resuming elective surgery during the COVID-19 pandemic

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Dear Editor,

We congratulate the authors for their recently published current concepts review based on International Consensus Group (ICM) guidelines for “Resuming elective surgery during the COVID-19 pandemic” (1). COVID-19 is an evolving situation and several guidelines provide a list of recommendations to reduce pathogen transfer during the reintroduction of elective orthopaedic surgical procedures. Still, there are areas of debate as these are based on currently available and scant scientific evidences. We believe few particular areas of recommendations can be explored further.

Role of type of COVID-19 testing prior to restarting elective surgery

It has been acknowledged Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) test for SARS-CoV-2 would be mandatory given the risk of disease transmission by the asymptomatic patients, prior to

elective surgery. Given a 35-40% false negative results for the current RT-PCR test, the question arises whether antibody tests for SARS-CoV-2 should be also undertaken simultaneously with the antigen test, to assess immunity along with other infection control measures, as it may be beneficial in reassuring both the patients and health care workers (1). Though there have been concerns about the reliability of current automated immunoassays and lateral flow rapid tests for detecting antibodies, recent announcement by Roche's (Basel, Switzerland) about a reliable test has provided reassurance on this front.

Elecsys® Anti-SARS-CoV-2 test an immunoassay with quoted specificity greater than 99.8% and 100% sensitivity (14 Days post-PCR confirmation) to help assess patients' immune response to coronavirus. The U.S. Food and Drug Administration (FDA) have issued an Emergency Use Authorization (EUA) for its rapid use and thus in serological survey of the population to develop epidemiological strategies during the current pandemic (2).

Protection of both the patients and health care workers

So far, all the guidelines have been mainly in favour of protecting the healthcare workers, similar to these guidelines. But, the patients should also have the right to know the status of COVID-19 test of their treating health care workers. There is no denial that the patients at high risk like elderly, with comorbid medical conditions like diabetes, hypertension, heart and lung diseases etc. and those undergoing dialysis, chemo or radiotherapy are likely to acquire infections easily. As a high risk group these patients should be checked for COVID-19 as a routine and again if they have any COVID-19 related symptoms (fever, shortness of breath, cough, loss of smell and taste, diarrhoea, sore throat etc). We believe that it is also their right to protect themselves from getting infection whilst in the hospital from various sources, including health care workers, who are looking after them. They are more prone to acquiring infection from others rather than passing it on to others! Screening of all individuals including health care workers to identify 'innocent viral spreaders' should form a part of work-up prior to involvement with a 'COVID-19 free' facility using SARS-CoV-2 antigen and antibody tests using Enzyme-linked immunosorbent assay (ELISA) kits (3). These tests must therefore be routinely offered by the healthcare providers to their workers, including doctors, nurses etc.

Theatre ventilation system

Normal positive pressure theatre ventilation systems with High Efficiency Particulate Air (HEPA) filter/Laminar flow with high frequency and rapid air changes have been recommended in the guidelines to reduce the presence of airborne pathogens. HEPA filters are proven to be able to collect and filter particles greater than 0.1 microns with an efficiency greater than of 99.97%. However the SARS-CoV-2

novel corona virus itself is only 0.125 microns. Lessons learnt from the previous SARS pandemic (2003) should be applied during the current situation with consideration to whether the HEPA filter units should be illuminated with ultraviolet germicidal irradiation. Apart from ensuring the neutralization of pathogens trapped by HEPA filters, viruses smaller than 0.1 micron will be neutralized by ultraviolet irradiation (4).

Resuming elective surgery in evolving and developing countries like India with resource challenges

We wondered how evolving and resource challenged economies like India etc. will be able to apply these recommendations in their health care systems. Apart from an acute shortage of orthopaedic staff and equipment, availability of wide spread SARS-CoV-2 testing; affordability of surgery (with added cost due to various infection control measures), joblessness, and a deep economic recession will have significant impact for the patients requiring surgery (5). We agree with the authors that each healthcare system (and also the various countries) should determine how to implement these recommendations, based to their problems and resources and these cannot be taken as a panacea!

Disclaimer: e-Letters represent the opinions of the individual authors and are not copy-edited or verified by JBJS.

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Conflict of Interest: None Declared