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LETTER TO THE EDITOR

Orthopaedic Surgery in Times of COVID-19 in India

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Dear Editor,

We are used to invisible enemies in our practice but this time it is different. We may be the victims this time, like other orthopaedic surgeons around the world, along with our patients, despite meticulous precautions. In these testing times, as we enter phase III of the coronavirus pandemic in India, we are faced with difficult decisions to make regarding the surgeries to perform and those to defer[1,2].

The fear of asymptomatic carriers in patients and colleagues should not weigh on the decision to operate but should be evaluated by the urgency of the procedure; existing and anticipated COVID-19 cases in the hospital and region; availability of PPE, beds and staff; and finally, age and health of the patient.

What constitutes elective surgery? The traditional elective surgeries like arthroscopy and arthroplasty are obvious no-brainers but what about trauma? Are all fresh fractures emergencies or only life and limb saving surgeries? This is tight rope walking for surgeons.

In times where several hospitals have started taking special 'Corona consent', do we save ourselves and hopefully patients' lives now and manage complications like non-union or malunion later[3]? How about our relatives and patients with whom we have a long-standing or good relationship with? How do we turn them down? The tough task of decision making should be a collective effort after discussion of each case and cannot be just put into one category or other. Luckily the lockdown imposed by the government has considerably decreased the number of trauma patients but on the flip side, being in an apex institute means every case gets referred to us from the smaller hospitals/nursing homes that have closed doors to patients they usually cater to otherwise. In our humble opinion, upper limb surgeries take a back seat especially clavicle, scapula, diaphyseal upper limb as well as non-dominant hand fractures. Femur fractures need to be addressed while patella, leg, foot and non-life-saving pelvi-acetabular surgeries may be delayed or managed conservatively. Spine fractures may be managed conservatively if cauda equina symptoms or significant deficit is not present. Pediatric and congenital deformity surgeries may be postponed whereas, malignancies, tendon injuries, amputations, acute infections and abscesses of bones or joints, periarticular fractures and periprosthetic lower limb fractures may not wait. Outpatient visits may be restricted to recent postoperative patients only.

Senior surgeons or those with co-morbidities may minimise patient interaction especially in operation theatres and allow essential surgeries to be performed by younger surgeons. The lockdown has thrown outpatients into disarray as public transport is not available and most times, no direct telephone access to orthopaedic surgeons may be possible in certain situations. Those with plaster or acrylic casts on, well beyond two months, have no way to cut them at home and no means to reach the hospital.

There are many questions, yet few answers. In the end it is an occupational hazard that we have to live with.

Note: The first author had a recent uncomplicated right-side anterior shoulder dislocation (dominant) with a large labral tear apart from a ligament injury, yet chose to avoid surgery now despite having access to the best surgeons in the country, till the air clears and hopefully not have lasting worries.

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RESPONSE FROM EDITOR

Covid-19 in Indonesia: Lesson from our patients

"The new normal" is a phrase that has been repeatedly used to depict our daily situation. COVID-19 pandemic has forced us to adapt out of norms indefinitely, as the discovery and investigation of vaccine and definitive treatment are still along the way. In Indonesia, the rate of confirmed cases and death tolls keep increasing, as the tested population have yet reached 1% of total national population. And sadly, we also have one of the highest death tolls of healthcare workers in Southeast Asia[1].

American College of Surgeons recommends hospitals to limit the group of cases that shall be operated[2]. In one of Indonesian public hospitals, Orthopaedic surgeons are only allowed to perform surgeries on emergency, malignancy, and infection cases, whereas elective surgeries shall be postponed indefinitely. For private practices, implication of such rule may put the hospitals in bankruptcy, as most of their funding rely on the number of patients visit, whereas their expenditures may be higher. Hence, this case restriction is not applicable for private hospitals and elective patients are still receiving care.

Hospital visits shall be limited to lessen the exposure. To lessen the number of visits, some Orthopaedic surgeons extend the length of post-operative joint replacement stay of their patients up to 10-14 days to receive the multidisciplinary care, including rehabilitation and wound care. Following their discharge from the hospital, patients may consult their surgeon through telemedicine unless emergency cases ensue.

Acknowledging the Covid-19 infection status of the patient and applying risk stratification system may answer these problems. Initial assessment (clinical, laboratory, and radiology) and COVID-19 testing by PCR or serology prior to surgery planning are needed to stratify patients' risks. The origin and quality of sample tested for PCR determines the success rate of COVID-19 detection. A study from Wang *et al* shows the differences in positive PCR rates among all origin of human biologic samples, revealing the highest positive rate is taken from bronchoalveolar lavage fluid (93.%), nasal swabs 63% and pharyngeal swabs 32%[3].

Risk stratification allows physicians to ensure the safety of patients and hospital workers from any cross infection. Patients with higher risk of COVID-19 infection must comply to the designated zone, with workers donned with appropriate PPE. In any procedural room, including the operating theatre, hospital must assess for any possible aerosol-generating procedures and later, provide the appropriate PPE. This system can also be applied to a bigger community to avoid large scale lockdown or movement restriction, which will put the nation's economy in danger.

As take-home messages, patients shall reduce their number of visits to the hospital and utilise telemedicine for consultation and extension of prescription, if necessary. To support this measure, attendings may extend their length of stay for postoperative patients to receive comprehensive care. However, acknowledging patients' status of COVID infection plays important role in determining subsequent care of patient.

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RESPONSE FROM EDITOR

Adequate safety, appropriate care: Operating in Orthopaedics during COVID-19

In Singapore, the Orthopaedic community share your concerns where healthcare personnel are at increased risks. Evidence of COVID-19 transmission from asymptomatic individuals[1] brings challenges to orthopaedic practice in terms of nosocomial transmission, isolation and cohorting requirements and increased post operative complications in undetected individuals.

It is imperative healthcare personnel, the very resource indispensable in our fight against COVID-19, do not fall victim themselves. Nosocomial transmission rates can be minimised by screening, protection and minimising contacts. Screening includes obtaining relevant contact histories, coryzal symptoms, and identifying at-risk cohorts such as institutionalised patients and workers residing in dormitories in Singapore's context. All individuals, including healthcare workers and patients are mandated to wear masks and good hand hygiene practices are performed universally. In treating established COVID-19 cases and suspect cases, especially for procedures with aerosolization[2], full personal protective equipment including fitted n95 masks, goggles, face-shields, gown and gloves are donned and appropriately discarded. Safe distancing, lock-downs and circuit breakers imposed by governments world-wide serve to minimise person-to-person contact, and the healthcare institution responds by limiting consults and surgeries to urgent conditions.

When Singapore went into DORSCON Orange on 7 Feb 2020, non-urgent surgeries were postponed to prevent overwhelming the healthcare system, and allow for effective cohorting and isolation practices with a reduced inpatient load. However, with the realisation that asymptomatic carriers can still have stormy post-surgical recoveries[3], the risk-benefit ratio needs to be properly weighted in decisions to undertake any Orthopaedic surgery.

Instead of urgent versus non-urgent procedures, we should ask ourselves if the pathology is life-threatening, limb threatening or life-style threatening. In instances of life or limb threatening conditions such as major musculoskeletal sepsis, open injuries, and acute spinal cord compression, the benefits of intervention would outweigh the impact of COVID-19 on post-surgical recovery. In other instances, urgent surgeries such as hip fractures, and musculoskeletal oncology would need to take into account current risks, the capability of the healthcare infrastructure to holistically deliver the care required, and the potential length and effects of a delay. The answer is not obvious, as the need to undertake a short delay becomes necessary depending on how overwhelmed the healthcare situation in a country is. We agree with the author that conservative management should be undertaken where outcomes are not compromised. Arthroplasty and most arthroscopic procedures are currently deferred. However, with a protracted pandemic, frustrated patients and overbooking of downstream surgical lists are becoming a concern in Singapore. The embargo on elective procedures during the Circuit Breaker period in Singapore has financial implications on private surgeons. The public sector is less affected financially, but is subject to frequent manpower deployments.

Till a safe and effective vaccine becomes readily available, the COVID-19 pandemic could change surgical protocols forever. As elective work resumes, screening practices should continue and universal precautions rigorously followed. We should continue to study best practices, such as the routine swabbing of pre-surgical patients[4], anticoagulation in view of possible thrombotic tendencies[5], and remain open to adopting them in practice.

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