"Multi-faceted" COVID-19: Russian experience

Editor

According to current live statistics at the time of editing this letter, Russia has been the third country in the world to be affected by COVID-19 with both new cases and death rates rising. It remains in a position of advantage due to the later onset of the viral spread within the country since the world-wide disease outbreak.

The first step in "fighting" the epidemic was nationwide lock down on March 30th, 2020.

Most of the multidisciplinary hospitals have been repurposed as dedicated COVID-19 centres, so the surgeons started working as infectious disease specialists. Such a reallocation of health care capacity results in the effective management of this epidemiological problem¹. The staff has undergone on-line 36-hour training course to become qualified in coronavirus infection treatment.

The surgeons of COVID-19 dedicated hospitals do rarely practice surgery. When ICU patients need mechanical ventilation, percutaneous tracheostomy under endoscopic control is mostly performed, as it decreases the aerosol formation, viral load on staff and complications, associated with an endotracheal tube in comparison with surgical tracheostomy². However, it is still associated with the risk of aerosol formation, so different approaches should be considered for a long-time perspective³.

The majority of the studies dedicated to colorectal diseases are temporarily paused. The teaching and training are mostly translated via online platforms, which has excluded the opportunity to get clinical experience in surgery⁴.

The approach to patient routing has changed significantly. If one is not diagnosed with COVID-19 CT scan

and laboratory testing are provided immediately. The patients should be admitted to the surgical department, where treatment is provided only to those COVID-19 negative.

The patient isolated for more than 2 weeks and COVID-19 negative as a result of 2 subsequent tests is admitted to the surgical department with an option to readmission to the infectious department and can be treated by surgical staff, which does not work with COVID-19 positive patients.

The patient, diagnosed with coronavirus infection and treated at home is admitted to COVID-19 dedicated multidisciplinary hospital, where surgical care is provided. Those treated in infectious diseases hospital or COVID-19 dedicated centre are managed by the surgical team present.

Surgery has become highly elective, being mostly available for high-risk patients with emergencies, malignancies, cardiovascular pathologies or infections. Preoperative testing in surgical patients with respiratory symptoms and history of travelling or contacting with COVID-19 positive people and postoperative recovery in the operating unit seem to be highly effective measures⁵. A lot of rearrangements are performed locally regarding personal protective equipment, the organization of scrubbing, donning and doffing, and dedicated changing areas. Moreover, observational departments are organized in surgical hospitals for patient allocation before coronavirus infection status is defined⁶.

Surgery for benign disorders, precancerous lesions, and reconstructive procedures are currently postponed. Regarding colorectal cancer, surgical treatment may be postponed, if it is a non-obstructing disease⁷.

Laparoscopic surgery and diathermy are limited as well. The importance of

special operating theatre for COVID-19 patients with negative pressure ventilation, unidirectional laminar flow, as well as the use of smoke evacuation systems during surgery are taken into account⁸.

Such an electiveness of surgery is concerning, as it might cause a worldwide healthcare catastrophe in the post-pandemic era⁵. More efforts should be taken to expand the amount and types of surgical procedures performed.

Due to the early preventive and corrective actions we have already reached the plateau in new cases curve, counting for up to 8984 cases identified at the time of writing this paper (June 7th, 2020), with a mortality rate of 1.5075%. These statistical outcomes are resulted by a 68-day lockdown, admission regime, and healthcare rearrangement. Thus, multistep restriction lifting has already started to consistently recover in both social and economic aspects.

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