Surgery scheduling in a crisis: Effect on cancer patients

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Coronavirus 2 is the cause of an ongoing international pandemic of respiratory illness, known as coronavirus disease 2019 (COVID-19) [1]. It consists of the largest pandemic since the swine flu outbreak in 2009, claiming more than 300,000 deaths until today [2]. This pandemic is proved to be a major public health challenge for health systems internationally, stressing the capacity of intensive care units (ICU) and means of mechanical ventilation [3].

Many surgical departments cancelled all elective cases to manage the projected extreme demand of ventilators, and ICU beds. Major surgeries, especially life-saving ones such as transplants and major surgical oncology procedures have been drastically decreased during COVID-19 [4,5]. The effect of the lockdown on the treatment of these patients is not well described yet. Experience from New York [6] described a COVID19-inspired operating room (OR) scheduling system to better utilize limited hospital resources. A research group from New York proposed an evaluation and grading system for every surgical case based on its severity and the predicted resource utilization [6]. The main issue with such proposal is that the allocation of resources was not always fair and did not prioritize patients based on maximum potential benefit [7].

However, emerging data showed that delay of surgery for oncological patients would mitigate 19-43% of life-years gained by hospitalization of an equivalent volume of admissions for COVID-19 [8]. Also, delays in surgical management of cancer patients in more advanced treatment phase (e.g pancreatic cancer responsive to neoadjuvant therapy) and transplant candidates at high risk of waiting list mortality could be potentially lethal. Unfortunately, there are no available data worldwide on how were these patients managed and how the pandemic affected their overall treatment plan. Also, the incidence of avoidable mortality due to the impact of the pandemic on OR availability is not reported. Data from Italy showed that careful selection of cancer and transplant patients did not significantly stress hospital resources. More specifically, during lockdown, only 20% of patient undergoing elective oncologic and transplant surgery were admitted to the ICU [9].

We strongly believe that individualization of care should be implemented now that most surgical departments worldwide are gradually restarting elective scheduling [10,11]. Cancer and transplant patients should be prioritized based on their phase of treatment and predicted mortality to maximize the patient benefit taking into consideration the resource utilization and the backlog clearance.

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References


