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Vascular Surgeon Discomfort in a Pandemic Setting



During coronavirus disease 2019 (COVID-19) outbreak, which is responsible of more than 230,000 confirmed cases and 34,000 deaths in Italy at the time of June 9,¹ surgical units have been stressed to maintain the service for urgent patients, irrespective of COVID-19 infection. In this time, all the patients presenting with vascular emergency are screened for COVID-19 with a pharyngeal swab and considered as positive until further investigations and diagnosis. However, those patients who require urgent surgical vascular therapy are managed as COVID-19 positive and, consequently, operating room staff have to wear personal protective equipment to minimize infection. In these cases, all urgent interventions are carried out in an ad hoc operating room, equipped for preventing virus transmission to others.

This solution determines two prominent difficulties. First, the careful evaluation of surgical and anesthesiologic instruments, prepared to avoid intraoperative and postoperative contamination. Second, the surgeon dressing, composed by two sterile gloves, a protective coat, leg protections, proper head and neck coverage, a FFP2 mask and, over that, a surgical mask. Above these, the “regular” surgeon uniform, a further surgical coat and a pair of sterile gloves, is worn. In case of an endovascular intervention, lead garments are additionally needed. In this scenario, augmented stress for the surgeon may be present due to excessive sweat, difficulty in breathing, and untimely weakness. These troubles represent adjunctive stress for surgeons, leading to increased operation time, amplified risk of mistakes, and accidental contamination in case of a COVID-19-positive patient. These considerations are factual for both vascular operations: in case of endovascular ones, because of a reduced sensibility when using guidewires and catheters, and during open surgery, more physically demanding. Discomfort and pain during vascular surgery have been inversely and conversely correlated with professional satisfaction and burnout, respectively.² Vascular

surgeons have been described also as potentially prone to be subject to ergonomic postural risk during surgery.³ Furthermore, Italian health-care professionals reported relevant work-related psychological pressure, emotional burnout, and somatic symptoms during pandemic.⁴

All these issues are not of secondary importance during this pandemic time and should be taken into account when planning and performing vascular operations.

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