

Management of Personal Protective Equipment in Plastic Surgery in the Era of Coronavirus Disease

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Sir,

n the era of the novel coronavirus pandemic, all elective and nonessential plastic surgeries can be delayed. Nevertheless, plastic surgery procedures such as removal of cancer should be given priority. The management of plastic surgery patients should be planned to reduce the risk of the severe acute respiratory syndrome coronavirus 2 transmission among patients, clinical staff, and surgeons. Health care workers should protect themselves and prevent transmission in the healthcare setting. Nowadays, in our hospital, the stockpile of personal protective equipment (PPE) is insufficient, particularly of medical masks and respirators. An inappropriate use of PPE supply should be avoided. In particular, few PPEs are given to our Plastic Surgery Unit rather than other Units of the same Department such as Otorhinolaryngology or Oral and Maxillofacial Surgery where there is a high transmission risk during oral medical examination and procedures. For this reason, we developed strategies to optimize the use of PPEs. For all surgical procedures performed in the trunk and limbs, patients without respiratory symptoms are given a surgical mask to wear during preoperative evaluation, surgery, and postoperative care. In these procedures, the surgeon uses a surgical mask. In case of suspected patients with respiratory symptoms, confirmed coronavirus disease 2019 (COVID-19) patients, or patients undergoing head-neck and facial plastic surgery, the use of respirators (N95/P2/FFP2 or equivalent) is highly recommended for the surgeon. If testing for COVID-19 is available, it should be reserved to patients undergoing head and neck surgical procedures or facial plastic surgical procedures, especially if performed in local anesthesia, where the use of patient medical mask is not feasible. Hence, if a negative result is obtained, the use of respirators for operating room staff without close contact with patient can be avoided.

The same respirator should be used for a maximum of 8 hours to maintain its protection and to avoid

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Received for publication March 29, 2020; accepted April 9, 2020. Copyright © 2020 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of The American Society of Plastic Surgeons. This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal. Plast Reconstr Surg Glob Open 2020;8:e2879; doi: 10.1097/ GOX.00000000002879; Published online 21 May 2020. adverse effects of face masks.¹ Using 1 respirator for longer than 4 hours can lead to discomfort and should be avoided.^{2–5}

For this reason, it is mandatory to plan surgical sessions with limb and trunk surgical procedures in the beginning, and head and neck surgical procedures and suspected patients to follow accordingly. The same can be stated for postoperative cares at the outpatient clinic.

If the activity is longer than 4 hours, the surgeon should begin his activity by using a surgical mask and, then, a respirator. If the surgeon has only 1 mask and/ or respirator per day, he should not remove it between patient encounters. Extended use and reuse of masks and respirators are high-risk practices and may lead to self-contamination.

Moreover, the use of alternate or different spaces between different categories, such as (1) patients undergoing trunk or limb surgery wearing medical mask and without symptoms or (2) patients undergoing head and neck examination (without medical mask) or (3) suspected and confirmed COVID-19 patients, is essential to reduce the spread of pathogens and the contamination of surfaces and inanimate objects.

Finally, a detailed description of medication stages has to be explained to head and neck patients: these patients have a high risk of contamination during self-medication because of the possible contact between hand and mouth/ nose/eyes.

It is essential to carefully plan the list of surgical and outpatient procedures to reduce the viral transmission risk. Even if out of the plastic surgeon mindset, this organization should have a high priority.

This uniform policy in our Division of Plastic Surgery around the use of PPE and the patient's management is fundamental to avoid confusion among the surgeons and to put the health and safety of care workers and patients first.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

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