

A Simple Innovative Temporary Holding of the Face Mask in the Clinics

To the Editor: Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) induced coronavirus disease 2019 (COVID-19) pandemic has made lifestyle changes in people like Social distancing, wearing face Mask, and hand Sanitization during indoor/outdoor gatherings, public settings, and in all modes of transport. The main purpose of using the masks is to trap the airborne microorganisms and to avoid their inhalation. The mask becomes a virus collector during repeated breathing activities, as its outer surface is exposed to contaminated aerosols/droplets. Viruses stay for a considerable period of time on the surface of the mask and also diffuse to the inner layer during wear. Even in this pandemic, non-COVID patients report to healthcare facilities for emergency care and for routine care as the situation improves. It is essential that patients follow the Social distancing, wearing face Mask, and hand Sanitization protocol in their regular clinic visits to avoid SARS-CoV-2 infection transmission through any untested asymptomatic COVID-19 patients attending the clinic. Due to the scarcity of materials and affordability, patients wear medical mask (2 or 3 ply mask) or cloth mask, which are reused. The filtration efficiency of the masks differs between the various types available. Advanced technologies like three-dimensional printing and nano-fiber filters will produce masks usable for a longer period and reusable as well.

In dental, maxillofacial, craniofacial, and ear, nose, and throat (ENT) clinics it is necessary to remove the mask during the examination and treatment procedures. It is vital to handle the temporarily removed mask without contaminating the clinical environment. In the past 1 year, we have noticed that patients handle the mask in the clinics in different ways after removal, such as folding and holding the mask in their hand, pulling it around the neck or hanging it on 1 ear or keeping them in their handbag. All the above mask handling activities are potentially contagious due to possible microorganisms or SARS-CoV-2 virus in the outer surface of the mask infecting the patient and contaminating the clinic as well. Thus, we decided to overcome this problem of handling the reusable mask during the clinical procedures.

A simple, innovative face mask hanger is designed, fabricated and attached to the dental chair for effective use. Materials used were orthodontic stainless steel (SS) wire of 1 mm diameter, universal wire bending plier and a heavy wire cutter. A straight length SS wire was taken to a required length (decided by the circular arm size, where it is to be clipped-on) and a “Question Mark” shaped bending is done with a small “U” bend at the lower end and self-rounded at both ends of the wire as shown in Figure 1A. The vertical arm of the hanger is kept to 3 to 4 inches in length for the convenience of handling the mask. The upper part of the hanger is clipped to 1 of the lower level arms in the dental chair opposite to the operator side to avoid any interference during the procedure. The patient can remove the mask and hang it safely in the hanger as seen in Figure 1B. It is maintained at a lower level to avoid any microorganism shedding from the mask towards the working space. Also, the mask is handled only by the patient and hung nearby to be used easily. The mask can be hung as shown in the figure or can be in a folded position as well. As the hanger is of medical grade SS, it is autoclavable and also can be wiped with sanitizer between patients or multiple hangers can be fabricated and used to avoid any cross infection. We are using this innovative face mask hanger in our center for the past 1 year and found it convenient and safer in handling the patient’s masks during their clinic visits.

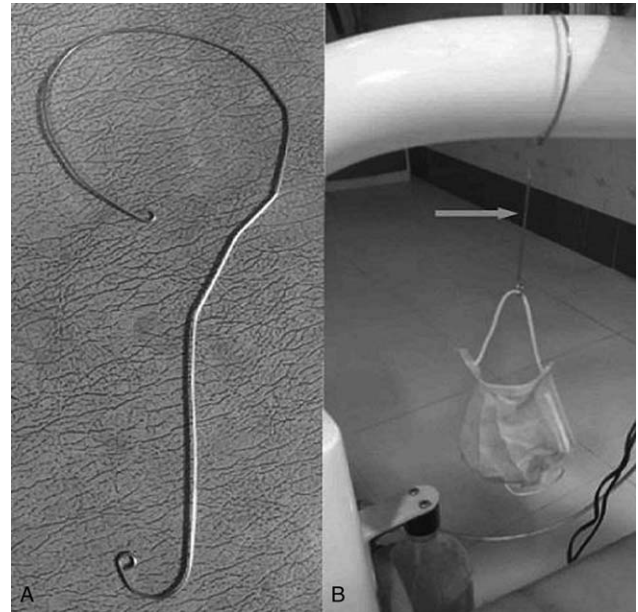


FIGURE 1. Face mask hanger: (A) fabricated stainless steel hanger and (B) hanger in position with a face mask.

Hence, we conclude that clinicians could benefit by this innovative face mask hanger, which is simple, user-friendly, cost-effective, and a safer opportunity in reusing the masks in clinics during this pandemic and thereafter as needed.

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The Multidisciplinary Approach in Head and Neck Oncology During COVID-19 Pandemic

To the Editor: As everyone is aware, oncologic patients need a multidisciplinary team of highly qualified physicians in order to handle not only the base pathology but also the multitude of complications that may supervene during the course of the treatment whether they are due to surgery, radio, or chemotherapy.¹

A multidisciplinary team needs the presence of a surgeon, an oncologist, a radiologist, and a pathologist. Moreover, the presence of a pain therapist (whether we refer to an oncologist or an anesthesiologist specialized in antalgic therapy), nutritionist, and psycho-oncologist are required. Dealing with head and neck cancer, our Oncologic Multidisciplinary Group foresees the collaboration of all the aforementioned figures. Both maxillofacial and ear-nose-throat specialists address the surgical aspect, whereas a radiotherapist assists the radiologists and oncologists. Moreover, in order to guarantee the beginning of every treatment in highly debilitated patients, a gastroenterologist deals with the management of the nutrition status of the patient if in need of nasogastric tube feeding or the placement of endoscopic percutaneous gastrostomy. This 360-degree management of the head and neck cancer patients, already considered as the gold

standard of treatment, has become of pivotal importance during the delicate historical moment we are living in.

Although cancer treatments were not completely suspended, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV2) pandemic has indeed created more obstacles for our patients. Prolonged required time for diagnostic or stadiative exams, the need of molecular nasal swabs to admit the patient in wards, reduced hospital beds and operating room availability, lack of oxygen and continuous positive airways pressure masks are just few of the problems we all had to deal with.^{2,3} Physical and chemical treatments of operating rooms and medical offices had to be constantly performed due to virus persistence on surfaces and surgical plans had to be adapted in order to find the best cost-benefit ratio, balancing the hospital and patient needs favoring less invasive, more conservative procedures delaying reconstructions in select cases and using local or regional flaps rather than complex free flap to minimize surgery time and hospitalization.⁴⁻⁶ Furthermore, the patients refrained from being visited in an outpatient setting or admitted inside the hospital in fear of contagion. This hesitation has increased the already unfavorable effects of diagnostic and therapeutic delay on oncologic, functional, and psychosocial outcomes in head and neck cancer patients, being timing one of the most important prognostic factors. Longer delay between onset of symptoms and diagnosis associates with staging progression, which in turn leads to more aggressive surgical and/or chemoradiation therapies, higher morbidity and loss of function, lower quality of life, and lower survival rate overall.

In order to respect social distancing rules and avoid any unnecessary contact and aggregation, we had to tackle these problems on multiple fronts. First, we converted de visu meetings in online meetings through the video conferencing platforms available. Then, we modified our approach on ward and outpatient's management, making the most of telephonic and e-mail communications in order to guarantee continuity of care. Obviously, the use of e-mails and instant messaging services as contact tools has not been an easy task: if we consider that head and neck cancer is a prerogative of old age and low sociocultural level patients, the doctor-patient relationship is often held by the caregivers. This approach has also been particularly complicated in more than one occasion.

Nonetheless, the well-rehearsed weekly online meetings has improved patient management limiting the aforementioned discomforts, reducing to the minimum the waiting times and allowing each specialist to be constantly updated on the clinical conditions of his patient. Recently, we have created a joint outpatient department in order to better follow the patient on each step of his/her treatment plan: from the diagnosis and therapeutic plan, to the surgical, radiotherapy, and oncological follow-up. Both in short and long term, the patients feel more involved and at the same time, it is easier for the specialists to guarantee continuity in follow-ups. The continuity we pursue becomes of crucial importance in spotting possible recurrence of disease if we consider the low follow-up adherence of head and neck patients, and allows us to promptly intervene accordingly.⁷

If we then take into account the patient's fear in hospital admission, when they are informed of simultaneous visits in the same location, it is perceived as a reassurance in reducing the contagion risk. The feedbacks we are collecting from our patients are extremely positive both on avoiding multiple hospital trips and the feeling of commitment on the personal case. From May 2020 to April 2021, our multidisciplinary oncologic group discussed and treated 128 patients: 60% by the surgical team and 36% by the medical oncology team. Specifically, Maxillofacial Surgeons operated 38% of patients, ENT surgeons 22%; 6% of patients received

chemotherapy treatment, 17% both chemo and radiotherapy treatment, 13% received radiotherapy treatment only. 4% of patients were unfortunately lost at follow-up.

Besides the benefits in patient care, the resident's formation has also improved. Although the practical training is partially crippled by the pandemic, residents have the opportunity to learn and exchange knowledge from a different yet complementary branch of medicine. Although clinics are learning specific physical examinations and posttherapy treatments, surgeons widen their knowledge in daily oncologic therapies, including support and palliative therapies, therefore exchanging knowledge peculiar of each specialization. In an era where the medical discipline has gradually compartmentalized in specialized and ultra-specialized branches, the chance to have an early multidisciplinary approach becomes fundamental. Patient management is in fact at its best and at the same time, the single specialist can benefit from the colleague's competences, cooperating toward a "continuum of care" for the good of the patient. Willing to find a bright side of the situation we are dealing with, we believe, beyond any doubt, that the spirit of cooperation that join us all in our daily practice is to be found again, more and more every day.

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REFERENCES

- Licitra L, Keilholz U, Tahara M, et al. Evaluation of the benefit and use of multidisciplinary teams in the treatment of head and neck cancer. *Oral Oncol* 2016;59:73-79
- Rauso R, Chirico F, Federico F, et al. Maxillo-facial reconstruction following cancer ablation during COVID-19 pandemic in southern Italy. *Oral Oncol* 2020;115:105114
- Cavallo L, Marcianò A, Cicciù M, et al. 3D printing beyond dentistry during COVID 19 epidemic: a technical note for producing connectors to breathing devices. *Prosthesis* 2020;2:46-52
- Cervino G, Fiorillo L, Surace G, et al. SARS-CoV-2 persistence: data summary up to Q2 2020. *Data* 2020;5:81
- Colella G, Rauso R, De Cicco D, et al. Clinical management of squamous cell carcinoma of the tongue: patients not eligible for free flaps, a systematic review of the literature. *Expert Rev Anticancer Ther* 2021;21:9-22
- Ozturk CN, Kuruoglu D, Ozturk C, et al. Plastic surgery and the COVID-19 pandemic: a review of clinical guidelines. *Ann Plast Surg* 2020;85:S155-S160
- Perlow HK, Ramey SJ, Cassidy V, et al. Disparities in adherence to head and neck cancer follow-up guidelines. *Laryngoscope* 2018;129:2303-2308