Correspondence
COVID-19 impact on Plastic Surgery local anesthetic lists

Editor,

Given the Covid-19 circumstances, the subject of local anesthetic workload in a university hospital's Plastic Surgery Unit is very relevant and up to date; maximizing utilization of theatre time and prioritizing patients during the current pandemic is an important issue throughout the public healthcare system. [1]

Our Plastic Reconstructive and Aesthetic Surgical unit is part of the University of Naples Federico II's with a high demand in plastic surgery patients coming from all parts of Southern Italy.

During the Covid-19 emergency, starting in February 2020, National Health Service constraints forced hospital management to revise resource allocation in order to cope with the sudden and urgent inflow of Covid-19 patients, with Italy being the first and the most affected country in Europe. Plastic Surgery Units, even if not directly impacted, were not spared in the first Pandemic wave; as a result of hospital Covid-19 protocol modifications and restrictions in hospital admissions and patient operating lists, we were forced to immediately rearrange the organization of our Unit Local Anesthetic (LA) theatre, which had followed routinely 7-8 patients/list for many years.

Out of a university hospital system, plastic surgery cases, according to the priority score, can be often delayed. Nevertheless, in patients with progressive diseases such as skin or head and neck cancers, delaying the surgery, can lead to cancer progression. [2]

Given the emergency situation, a reasonable approach in clinical practice was considered to postpone all elective surgery and carry out only the most urgent procedures in order to preserve staff resources and minimize contamination. [3]

Back in March 2020, since a high percentage of referrals in our unit were for skin cancer, a dedicated Plastic Surgery theatre extra nurse was hired to join the Local Anesthetic staff, made of two surgeons and one scrub nurse. This dedicated LA theatre nurse duty was to accomplish with all the new COVID protocol checklists, ensuring continuity to our weekly operating LA schedule of three mornings-a-week scheduled patients on Mondays, Wednesdays and Thursdays from 8.30 a.m. to 1.30 p.m.

Our operating theatre platform includes one theatre specifically dedicated to local anesthetic plastic surgery patients, having two separate accesses, one for staff and a separate one for patients. The platform has two separate changing rooms allowing for the admission of two patients simultaneously. After undergoing the procedure, patients return to the changing room by way of a separate exit route and finally discharged. Since our LA patient corridor is only a few meters long, ID bands are not necessary.

To meet the new Covid-19 protocols, the dedicated nurse admitted the patients and guided them through the pre-established route. For each patient admitted, the nurse recorded body temperature, confirmed the negativity of the Covid-19 test done at least 48h before and filled in a statement in which the patients declined any respiratory symptom and any possible contact with positive patients.

LA surgery theatre protocol contemplated that the first patient entered the operating room at 8.30 am, the second at 9.30 am, the third at 10.30 am and so on, with 60 minutes scheduled for performing each surgical procedure and discharging the patient outside the theatre platform.

A discharge letter was provided to each patient with medication and wound dressing instructions; patients' postoperative care was managed via an institutional Plastic Surgery Unit e-mail and through WhatsApp [4] in order to reduce follow-up returns to the hospital, In accordance with hospital Covid-19 protocols.

Thanks to the dedicated nurse, the LA operating sessions continued to be performed without interruption.

We have retrospectively analyzed our clinical data from March to June 2020, during the first Covid-19 emergency wave: over a period of 4 months 241 patients were treated: we performed 284 plastic surgery procedures, of which 221 skin cancer lesions' excision +/- reconstruction, over 48 LA surgical sessions with an average of 5,02 patients per session and 15,1 per week.

This workload led to 241 Discharge Codes (DRG) counting for 373.550€, with an average value of 1550€ per patient. The DRG values in Euro were calculated through our Hospital operative system.

Pre pandemic data referring to the same period summed up for 291 procedures in 284 patients, counting for 382.757 € with a difference of just 9.207 € (2,4%).

Within the costs-profits analysis, considering the extra cost of 5000€ for the mentioned project-based contract to employ the extra-nurse per 4 months, the benefits provided to the Hospital management were evident.

Excessive downtime in local anesthetic (LA) patient lists leads to surgeon frustration, patient delays, and wasted resources, which, due to the necessity of meeting the new Covid-19 protocols could only became worse. [1] Many hospitals are affected by this problem and expend their resources to find opportunities to improve efficiency. Prior to the COVID pandemic outbreak, our group was also involved in the deployment of a hand trauma day surgery (HTDS) operating list with several advantages resulting from a systematic organization and schedule. [5]

Before the Covid-19 pandemic, our LA theatre would have treated 7 to 8 patients per session, including various elective procedures (lipoma and sebaceous cyst excision, scar revision, nipple area complex reconstruction, etc.) Since the outbreak, what we found was that even with restrictions and specific protocol rules, we succeeded in treating five patients per session, by employing our extra LA theatre, redesigning our LA theatre coordination process and reducing patients' number.

Based on our short-term retrospective study, we concur with the findings of the article: "Maximizing efficiency in plastic surgery local anesthetic lists", that the accumulation of small gains shortens downtime and leads to improved efficiency. [1]

Notwithstanding restrictions, as healthcare providers to the general public, we report that, thanks to our procedural adjustments and the hiring of an extra LA nurse, we have succeeded in maintaining almost the same skin cancer workload as before the outbreak of the pandemic, which has circumvented the expected prolonging of skin cancer waiting lists and maintained satisfactory patient levels.

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