

Nonmelanoma Skin Cancer in COVID-19 Era: The Foggia Experience

Dear Editor,

Italy is one of the most affected countries by coronavirus disease-2019 (COVID-19) in 2020.^[1] After March 9, social restrictions were applied and public hospitals were completely rationalized. New safe pathways for COVID patients have been created, any screening visits have been blocked, management of oncologic patients has been

guaranteed, and telemedicine has been implemented for consultation.^[2-5]

During the COVID-19 pandemic, our Plastic Surgery Department worked to keep cancer services active despite significant operative problems, including reduction and reallocation of anesthesiologists, and reduction of the medical and nurse workforce due to contagion.

Table 1: Summary of results

	2019 (no. of lesions = 817)	2020 (no. of lesions = 531)	P
Age (mean [SD])	73.5 (7.2)	74.2 (6.9)	0.45
Sex (n)			0.23
Males	506	321	
Females	311	210	
BMI (SD)	25.3 (4.21)	26.2 (5.41)	0.14
ASA score			
I	458 (56%)	354 (66.7%)	0.32
II	312 (38.2%)	171 (32.2%)	
III	47 (5.8%)	6 (1.1%)	
IV	0	0	
Smoke			
Yes	523 (64%)	288 (54.2%)	0.12
No	294 (36%)	243 (45.8%)	
Diabetes mellitus			
Yes	172 (21%)	105 (19.8%)	0.22
No	645 (79%)	426 (80.2%)	
Mean time to procedure (days)	37	32	0.11
Body site (%)			0.27
Head—neck	63.2	68.6	
Trunk	22.8	18.5	
Upper limb	11.7	10.4	
Lower limb	2.3	1.5	
Histological diagnosis (n)(%)			0.021
BCC (basal cell carcinoma)	610 (74.7%)	362 (68.2%)	
SCC (squamous cell carcinoma)	179 (21.9%)	155 (29.2%)	
Actinic keratosis	17 (2.1%)	10 (1.9%)	
Bowen's disease	6 (0.7%)	3 (0.6%)	
Others	5 (0.6%)	1 (0.1%)	
Largest tumor diameter in mm (mean [SD])	27.2 (7.1)	38.7 (5.2)	0.014
Reconstruction (%)			0.031
Direct closure	58.3	47.5	
Skin graft	27.8	32.2	
Dermal substitute	6.9	2.4	
Local flap	7	17.9	
Incomplete—all lesions (%)	9.3	3.2	0.45
Type of suture			0.015
Absorbable	38.4%	87.3%	
Not absorbable	61.6%	12.7%	

We investigated the differences in patients who presented to our department for nonmelanoma skin cancer (NMSC) excision in 2020 (COVID-19 era) as compared with those who presented at the same time in 2019.

We performed a retrospective, single-center case-control study comparing 531 patients treated for NMSC during the COVID-19 era in 2020 to results from 817 patients treated in the previous year. Data collected were compared using chi-squared tests for dichotomous data and unpaired *t* tests for contiguous data, with a $P < 0.05$.

The results are summarized in Table 1. Sex, age, body mass index (BMI), ASA score, smoking, diabetes, and lesion location were compared, and no significant difference was noted. In 2020 group, we identified a significant increase of squamous cell carcinomas (SCC) excised as compared with the previous year (29.2% vs. 21.9%, $P < 0.05$). Skin cancers excised in 2020 were significantly larger (38.7 ± 5.2 mm vs. 27.2 ± 7.1 mm, $P < 0.05$) and these lesions required more complex reconstruction (i.e., skin flap or graft), with fewer lesions amenable to direct closure (47.5% vs. 58.3%, $P < 0.05$). We observed a significant reduction of reconstruction with dermal substitutes in COVID-19 era (2.4% vs. 6.9%, $P < 0.05$), probably for the necessity of single-stage treatment. No statistical difference was observed between the two groups in incomplete excision rate that was lower in 2020 than in 2019 (3.2% vs. 9.3%, $P = 0.31$). The use of absorbable sutures in COVID-19 era was significantly increased (87.3% vs. 38.4%, $P < 0.05$).

The results of our study showed that in the COVID-19 era our department treated a minor number of NMSCs (531 vs. 817), but significantly larger, with a higher proportion of SCCs requiring more complex reconstruction after excision. We observed a significant reduction of patients admitted to our hospitals, probably patients feared becoming infected with SARS-CoV-2 in hospital stay. On the contrary, the reasons for increased size of NMSC treated in 2020 are likely to be multifactorial: the cancer screening opportunities are significantly interrupted (missed or later diagnosis); the patients have had delayed presentation to healthcare services; and the face-to-face appointments in primary care are reduced.

However, in our study, we found no difference in the time from initial diagnosis to definitive treatment between groups. In fact, although under operative problems, such as staff redeployed and operating rooms closed, our service continued to treat cancers in a timely manner.

In this current global lockdown scenario, our aim is to guarantee high-quality and timely care, minimizing COVID-19 infection risk.

We modified our treatment protocol following the Plastic Surgery and Dermatological Societies guidelines regarding the measures to minimize the transmission risk of COVID-19, covering topics including hand washing, personal protective equipment (PPE) for patients and providers,

risk of aerosolizing, ventilation, and disinfecting rooms between patient encounters. With our measures, there has been no known transmission of COVID-19 associated with surgery.

Moreover, our approach is based on reducing the operative times and the hospital stay, minimizing the necessity of general anesthesia, preferring simple reconstructive procedure according to the principle of “one-shot” surgery, and preferring dissolvable sutures to prevent need for additional visit.

We expect NMSC diagnosis to increase significantly in the coming months, although it is unpredictable if this pandemic-related delay could affect size, thickness, and patient prognosis. It should be considered to emphasize the fact that although aggressive and contagious, COVID-19 is not the only cause of death and that cancer must be diagnosed and promptly treated in specialized center.

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Conflicts of interest

There are no conflicts of interest.

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