

**LETTER**

# COVID infection and sentinel lymph node procedure for melanoma: Management in a dermatology center in a high-risk pandemic area

Dear Editor,

Since its introduction in 1992, sentinel lymph node (SLN) biopsy has been the principal staging procedure for cutaneous intermediate and thick melanoma.<sup>1,2</sup> After the Multicenter Selective Lymphadenectomy Trial II and the Dermatologic Cooperative Oncology Group trials, it remains potentially the last surgical procedure before the potential adjuvant setting or strict monitoring.<sup>3,4</sup>

Coronavirus disease-19 (COVID-19) is now a pandemic worldwide.

In Italy, the first cases were documented at the end of January, showing thereafter a striking spread. Given the lack of well-established literature guidelines, no definite data about management of melanoma patients can be drawn; however, some interesting points can be underlined. In fact, there was a discussion about postponing all surgical procedures until after the end of the pandemic, taking the risk of not diagnosing patients in the proper way and not being able to offer them the same survival advantage as earlier. Moreover, a positive SLN is a mandatory condition in non-metastatic melanoma to offer an adjuvant therapy.

Herein, we describe the surgical interventions for melanoma patient candidates for SLN and the challenge faced during the COVID-19 pandemic in our melanoma unit at the University Hospital in Turin, in one of the most affected areas of the country.

Firstly, we have to consider that the median age of the patients submitted for SLN is the late 50s,<sup>5</sup> so this raised a big issue, since age is the major risk factor for death by COVID-19 pneumonia.<sup>6</sup>

We have performed SLN biopsies on 41 patients since the beginning of the pandemic in Italy (1 March 2020); the average age was 55, among whom 4 were over 70. All candidate patients were correctly informed about the potential risk. All patients received an antibiotic prophylaxis before the starting of the procedure. The surgical procedure has been the same as before the COVID-19 era.<sup>7</sup>

The majority of the procedures were performed on the axillary/inguinal basin, while just six in the cervical region. All the SLNs in the cervical and axillary basin were submitted to general anesthesia, while the inguinal SLN were under spinal anesthesia.

The decision on the surgical management after positive SLN was not impacted by the pandemic, but it has followed the previous guidelines and protocols in the same unit.

Complete lymph node dissections (CLNDs) for positive SLN were performed on six patients who refused the strict ultrasound monitoring while three patients were submitted to therapeutic radical lymph node dissection for clinically detected nodal metastasis. Out of them, three neck dissections were performed. All the SLNs in the cervical and axillary basin were submitted to general anesthesia, as well as all the CLNDs, while the inguinal SLNs were under spinal anesthesia.

Patients were hospitalized in a double-bed room ward (for the night after the procedure usually, up to three nights for the cervical SLN biopsy), without the possibility of receiving visits from relatives or family members in order to reduce the infection risks.

We have not assisted any particular complications due to COVID-19. Before the procedure, only one patient showed a suspicious gastroenteritis and was submitted to a molecular test before the procedure, which resulted negative.

We assisted two postoperative adverse events that must be mentioned. Their appearance was in the first 24 hours after the surgical intervention. In detail, one was an erysipela in the groin surgical site of SLN, which was treated with antibiotics, and the other, a fever appearance that responded to paracetamol. Both patients resulted negative to the molecular test and did not show any worsening of the condition that might have made us suspect COVID-19 infection. Frequency of adverse events is in line with the ones observed in no-COVID-19 era.


All 41 patients are in regular surgical follow-up twice a week for the scar and surgical drainage devices check-up and have not shown any symptoms related to COVID-19. They were all admitted to hospital after having been checked for temperature and a risk and symptoms questionnaire. All patients entered hospital alone.

All the medical staff involved in the surgery department did not develop any symptoms during the pandemic.

In conclusion, our experience supports the possibility of continuing surgical diagnostic procedures in patients with intermediate melanoma candidate for SLN even if evaluating on a patient basis (elderly, comorbidities). Careful management of the patients is warranted in hospital and a strict monitoring of symptoms in case of suspicion.

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## REFERENCES

1. Morton DL, Thompson JF, Cochran AJ, et al. Sentinel-node biopsy or nodal observation in melanoma. *N Engl J Med*. 2006;355(13):1307-1317.
2. Ribero S, Osella-Abate S, Sanlorenzo M, et al. Sentinel lymph node biopsy in thick-melanoma patients (N=350): what is its prognostic role? *Ann Surg Oncol*. 2015;22(6):1967-1973.
3. Kudchadkar RR, Michelin O, van Akkooi ACJ. Practice-changing developments in stage III melanoma: surgery, adjuvant targeted therapy and immunotherapy. *Am Soc Clin Oncol Educ Book*. 2018;38:759-762.
4. Oude Ophuis CM, van Akkooi AC, Rutkowski P, et al. Effects of time interval between primary melanoma excision and sentinel node biopsy on positivity rate and survival. *Eur J Cancer*. 2016;67:164-173.
5. Savoia P, Fava P, Caliendo V, et al. Disease progression in melanoma patients with negative sentinel lymph node: does false-negative specimens entirely account for this phenomenon? *J Eur Acad Dermatol Venereol*. 2012;26(2):242-248.
6. Li X, Wang L, Yan S, et al. Clinical characteristics of 25 death cases with COVID-19: a retrospective review of medical records in a single medical centre, Wuhan, China. *Int J Infect Dis*. 2020;94:128-132. <https://doi.org/10.1016/j.ijid.2020.03.053>.
7. Quaglino P, Ribero S, Osella-Abate S, et al. Clinico-pathologic features of primary melanoma and sentinel lymph node predictive for non-sentinel lymph node involvement and overall survival in melanoma patients: a single centre observational cohort study. *Surg Oncol*. 2011 Dec;20(4):259-264.