- 2 Boekel L, Hooijberg F, van Kempen ZLE, et al. Perspective of patients with autoimmune diseases on COVID-19 vaccination. Lancet Rheumatol 2021: 3: e241-e243.
- 3 Toor SM, Saleh R, Sasidharan Nair V, et al. T-cell responses and therapies against SARS-CoV 2 infection. Immunology 2021; **162**: 30-43
- 4 Hiltun I, Sarriugarte J, Martínez-de-Espronceda I, et al. Lichen planus arising after COVID-19 vaccination. J Eur Acad Dermatol Venereol 2021: 35: e414-e415.
- 5 Tang W, Askanase AD, Khalili L, et al. SARS-CoV-2 vaccines in patients with SLE. Lupus Sci Med 2021; 8: e000479.

COVID-19-related consequences on melanoma diagnoses from a local Italian registry in Genoa, Italy

Dear Editor,

We read with interest the article of Valenti et al. 1 about the impact on skin cancer progression and prognosis due to the COVID-19 pandemic. The study reported a mean of approximately 6.2 months delay between the last follow-up visit. The excised tumor rate was higher between May 18 and November 18 in 2020 compared with the same period in 2019 (54 advanced skin cancers vs. 22, respectively). The number of surgical excisions was 280 (in 2020) versus 265 (from the same period in 2019) with eight advanced melanomas (in 2020) and four melanomas (in 2019).

We would like to focus on the impact of lockdown in Italy (from March 9, 2020, to May 18, 2020) and the COVID-19 emergency on melanoma prevention and diagnosis in 2020. Data from our institution (local referral center for skin cancers) comparing the period of time from January 1, 2019, to December 31, 2019, versus January 1, 2020, to December 31, 2020, showed an overall reduction of outpatients visits (20,384 vs. 11,374; -44%) and follow-up visits of melanoma patients with digital dermoscopy (956 vs. 619; -35%); therefore, a reduction of surgical procedures for skin cancers (1,120 vs. 956; -14%) and last melanoma diagnoses (138 vs. 87; -37%). Regarding melanoma thickness, the reduction was observed in both melanomas with <0.8 mm Breslow thickness (97 vs. 64; -33%) and T1b or with >0.8 mm Breslow index (41 vs. 23; -43%) and consequently of sentinel lymph node biopsies (SLNB; 36 vs. 18; -50%). From 2016 to 2019, we observed an increase in melanoma diagnoses and surgical procedures with subsequent pause in the trend in 2020 (Fig. 1).

A recent survey by IMI (Italian Melanoma Intergroup) reported that dermatological visits in 2020 underwent a significant reduction (-53%) from 7,732 (January 1, 2019-December 31, 2019) to 3,645 (January 1, 2020-December 31, 2020).

During the lockdown period in Italy, only dermatological first aid or follow-up visits under biologic treatment and urgent dermato-surgical procedures were guaranteed. Therefore, in most of the dermatology centers in Northern Italy, a significant reduction in surgical procedures and in the diagnosis of melanoma was observed (Table 1).2,3 Barruscotti et al.2 reported

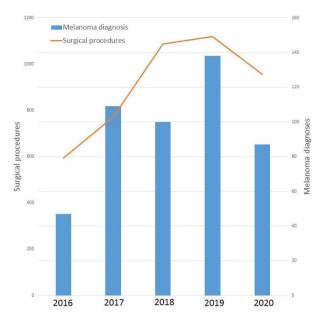


Figure 1 Melanoma diagnosis and surgical procedures from 2016 to 2020 in Galliera Hospital, Genoa, Italy

163 surgical excisions during the lockdown period in 2020 in comparison to 246 and 221 during the same period in 2019 and 2018, respectively. The total number of melanoma diagnoses was 6/163 in 2020 versus 24/246 in 2019. A similar situation has been reported by Longo et al.4 with a reduction of new melanoma diagnoses from January 1, 2019, to May 9, 2019, (141 in Rome and 115 in Reggio Emilia) and the same timeframe in 2020 (62 in Rome and 28 in Reggio Emilia).4 Filoni et al. observed a decrease of dermatological follow-up visits during the lockdown period (-30.2%) but with a total number of melanoma diagnoses almost unchanged (64 cases in 2020 and 66 in 2019; -3%).⁵

As a logical consequence of the reduced melanoma diagnosis, also SLNB in 2020 decreased in some institutions, as observed by Filoni et al. and in our department.⁵ In contrast, data reported by IMI show a slight increase in SLNB but are referred only to February-April 2020, not to all of 2020.

In conclusion, the COVID-19 pandemic had a severe impact on melanoma patients. Restriction imposed by the pandemic with limitations to access to dermatological departments forced patients to postpone visits with consequent delay in diagnosis. Particularly, the reduction observed in SLNB shows that high-risk melanoma patients were significantly affected.

The COVID-19 pandemic must become a lesson for healthcare providers and politicians, and future pandemics must be better managed. Teledermatology and teledermoscopy represent a valid alternative to face-to-face visits but still have to be implemented in routine work in Italy.

Table 1 Sentinel lymph node biopsy and diagnosis of melanoma in referral centers in Italy

Italian centers	Overall melanoma diagnosis				Sentinel lymph node biopsy			
	2019	2020	%	Period	2019	2020	%	Period
	138	87	-37	12 months	36	18	-50	12 months
IMI group N/S ³	3,156	2,386	-14.6 (N)	3 months	376	400	+4.2 (N)	3 months
			-33.9 (S)				+8.2 (S)	
Milan ¹	4	8	+50	2 months	N.A.	N.A.	N.A.	2 months
Rome ^b	141	62	-56	2 months	N.A.	N.A.	N.A.	2 months
Reggio Emilia ^b	115	28	-76	2 months	N.A.	N.A.	N.A.	2 months
Pavia ²	24	6	-75	3 months	N.A.	N.A.	N.A.	3 months
Padova ⁵	66	64	-3	3 months	31	22	-29	3 months

N.A., data not available; N/S, North/Center-South Italy.

Sanja Javor¹*, MD (D) Simona Sola², MD

Stefano Chiodi³, MD

Alexandra Maria Giovanna Brunasso¹, MD Cesare Massone¹, MD

¹Dermatology Unit, Galliera Hospital, Genoa, Italy ²Surgical Pathology, Galliera Hospital, Genoa, Italy ³Plastic Surgery, Galliera Hospital, Genoa, Italy *E-mail: sanja.javor@galliera.it

Conflict of interest: None. Funding source: None.

doi: 10.1111/ijd.15624

References

- 1 Valenti M, Pavia G, Gargiulo L, et al. Impact of delay in follow-up due to COVID-19 pandemic on skin cancer progression: a real-life experience from an Italian hub hospital. Int J Dermatol 2021; https://doi.org/10.1111/ijd.15501. Epub ahead of print. PMID: 33665815.
- 2 Barruscotti S, Giorgini C, Brazzelli V, et al. A significant reduction in the diagnosis of melanoma during the COVID-19 lockdown in a third-level center in the Northern Italy. *Dermatol Ther* 2020; 33: e14074.
- 3 Intergruppo Melanoma Italiano. The effect of COVID-19 emergency in the management of melanoma in Italy. Dermatology Reports 2021; 13: 8972.
- 4 Longo C, Pampena R, Fossati B, et al. Melanoma diagnosis at the time of COVID-19. Int J Dermatol 2021; 60: e29–e30.
- 5 Filoni A, Del Fiore P, Cappellesso R, et al. Management of melanoma patients during COVID-19 pandemic in an Italian skin unit. *Dermatol Ther* 2021: e14908. https://doi.org/10.1111/dth. 14908. Epub ahead of print. PMID: 33619813.

Comment on "Androgens and women: COVID-19 outcomes in women with acne vulgaris, polycystic ovarian syndrome, and hirsutism"

Dear Editor.

We read with great interest a study by Yale et al. 1 published in the *International Journal of Dermatology*. The authors studied the relation between hyper androgenic women, such as women with polycystic ovary syndrome (PCOS), nodulocystic acne, or hirsutism, and COVID-19. The authors noted that hospitalization rates among COVID-19-positive women of this cohort varied from 4.5 to 8%, with no significant increase in mortality rates compared to 11.4–11.7% in those without these conditions. Furthermore, there were no significant associations between the studied women on therapeutics and the rate of COVID-19 infection or hospitalization. These therapeutics included spironolactone, estradiol, and metformin. 1

Female hyperandrogenism is characterized by elevated androgen levels and is often a result of PCOS, which is one of the most common endocrine disorders in women, affecting 8–16% of all women. Patients with PCOS are at risk to develop resistant acne, hirsutism, and female pattern hair loss, in addition to metabolic syndrome. Unlike in the study by Yale *et al.*, authors from the United Kingdom noted that PCOS women had a 28% increased risk of suspected/confirmed COVID-19 compared to non-PCOS women. Interestingly, isotretinoin solely may be beneficial to patients with PCOS and acne who are not candidate for oral contraceptive pills. Feily *et al.* noted that low-dose isotretinoin (0.5 mg/kg/day for 15–20 weeks) in PCOS patients with moderate-to-severe nodulocystic acne resulted in significant decreases in levels of serum total testosterone, prolactin, and dihydrotestosterone. The latter promotes

^aThis study.

^bData from the same study, by Longo et al.⁴