Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Recommendations on dermatologic surgery during the COVID-19 pandemic

To the Editor: We read with interest the article by Chen et al[1] reporting the experience of a dermatology department at the center of the COVID-19 pandemic. As doctors, we have a responsibility to support measures that mitigate the spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), but at the same time, to provide essential medical care to our patients.

Cutaneous oncology poses a unique set of challenges. Having patients attend dermatologic surgery clinics increases the risk of transmission of SARS-CoV-2, takes medical staff away from other settings (including upskilling in critical care), and uses limited health care resources such as personal protective equipment. Deferring planned surgery may allow for disease progression, increasing tumor burden, which may result in more complex surgery and reconstruction, increasing the risk of metastasis, and the ultimate burden on the health care system.

There is no certainty regarding when the pandemic is likely to subside and no evidence-based recommendation regarding when deferred procedures should be undertaken. Several institutions have proposed an approach to dermatologic surgery during the pandemic.[2-4]

We propose the following guidelines (Table I).[5] Where possible, clinics should be triaged so that only urgent patients are reviewed in person, with telehealth used where appropriate.

Elective surgery, such as excision of benign lesions and cosmetic procedures, should be postponed. For conditions such as hidradenitis suppurativa, where minimally invasive dermatologic procedures, such as incisional and drainage, may relieve debilitating morbidity, should be pursued as soon as feasible. For superficial basal cell carcinoma, we recommend deferring treatment for 6 months, except where this may lead to significant morbidity, and for all other forms of basal cell carcinoma, deferring surgery for 3 to 6 months.

For squamous tumors, we recommend deferring treatment of actinic keratosis and squamous cell

Table I. Recommendations regarding dermatologic surgery during the COVID-19 pandemic

Area	Recommendation
Clinic structure	Triage clinics, rebooking according to clinical priority and use telehealth where possible
Waiting rooms	Screen patients before attendance to prevent high-risk cases from entering the practice
	Stagger appointment times to minimize patients in waiting room together
	Patient chairs spaced a minimum of 1.5 m apart
	Limit support persons to 1
	Remove possible sources of infection (such as magazines) in the waiting room
	Ensure all attendees hand sanitize on arrival
Procedures	PPE being rationed to allow for the best protective practices while also preventing a complete shortage. This is a dynamic process dependent on supply
	Consider N95 masks for perioroficial surgery
	Use dissolving sutures to minimize multiple presentations
Benign lesions	Cysts, lipomas, cosmetic procedures: defer for now
	Procedures that alleviate significant morbidity (eg incision and drainage of hidradenitis suppurativa abscesses) may proceed as soon as feasible
BCC	Superficial: defer treatment for 6 months
	All other: defer surgery for 3 to 6 months
SCC	Actinic keratosis and SCC in situ: defer for now
	SCC: guided by prognostic variables: location, size >2 cm, depth >2 mm, differentiation, perineural or lymphovascular invasion, recurrence immunosuppression[5]
Melanoma	Excisional biopsy with 2-mm border when melanoma suspected
	Melanoma in situ: defer treatment for 3 months
	Invasive melanoma: if histologic clearance obtained, defer wide excision and/or sentinel lymph node biopsy for 3 months
Other tumors	Benign tumors: defer for now, where medical investigation required (for fibrofolliculoma, tricholemmoma, sebaceous carcinoma, etc), this may be deferred
	Locally aggressive tumors (eg, dermatofibroma sarcoma protuberans, Merkel cell carcinoma, microcystic adnexal carcinoma, etc): proceed as soon as feasibly possible with consideration of patient and tumor variables

BCC, Basal cell carcinoma; *PPE*, personal protective equipment; *SCC*, squamous cell carcinoma.

carcinoma in situ. Treatment for invasive squamous cell carcinoma will require triage according to prognostic factors such as differentiation, location, depth, perineural invasion, and patient variables (eg, immunosuppression).[5] Alternative treatments, such as radiotherapy, carry their own set of logistical issues.

For suspected melanoma we recommend excisional biopsies over shave or incision biopsies given the uncertainty about when definitive treatment will take place, should it be needed. Treatment of melanoma in situ may be deferred for 3 months. Where histologic clearance of a melanoma has been achieved, wide excision may also be deferred for 3 months. Wide excision does not influence survival but decreases the risk of local recurrence.[4]

Given the spectrum of tumors encompassed by cutaneous oncology, treatment of rarer aggressive or indeterminate malignancies needs to be individualized according to tumor, patient, and health care resource considerations. We acknowledge that any recommendations we propose are likely to shift in the coming weeks as the COVID-19 pandemic evolves, and we welcome feedback from our colleagues given the paucity of evidence in this unprecedented time. The set point of the equilibrium between minimizing morbidity and mortality from infection and from malignancy will be mercurial, and our response as doctors will have to be equally dynamic.

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REFERENCES

1. Chen Y, Pradhan S, Xue S. What are we doing in the dermatology outpatient department amidst the raging of the 2019 novel coronavirus? *J Am Acad Dermatol*. 2020;82(4):1034.
2. British Association of Dermatologists and British Society for Dermatological Surgery. COVID-19 — Skin cancer surgery guidance. Clinical Guidance for the Management of Skin Cancer Patients During the Coronavirus Pandemic. Available at: http://www.bad.org.uk/shared/get-file.ashx?itemtype=document&id=6658. Accessed March 30, 2020.
3. Melanoma Institute Australia. Important notice regarding the management of clinically suspected primary melanoma during the COVID-19 crisis. Available at: https://mcusercontent.com/88a3bd528a963791abea7c880/files/b853272a-052d-4eeb-b62a-ea0bd2cbce60/Melanoma_Management__Covid_FINAL.pdf. Accessed April 7, 2020.
4. National Comprehensive Cancer Network. COVID-19 resources. Coronavirus Disease 2019 (COVID-19) Resources for the Cancer Care Community. Available at: https://www.nccn.org/covid-19/default.aspx. Accessed April 7, 2020.
5. Skulsky SL, O'Sullivan B, McArdle O, et al. Review of high-risk features of cutaneous squamous cell carcinoma and discrepancies between the American Joint Committee on Cancer and NCCN Clinical Practice Guidelines In Oncology. *Head Neck*. 2017;39(3):578.

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