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.

Creating dermatology guidelines for COVID-19: The pitfalls of applying evidence-based medicine to an emerging infectious disease

To the Editor: We recently coauthored a piece in the *JAAD* about modifications the American Academy of Dermatology (AAD) implemented to enhance the rigor of evidence-based clinical practice guidelines.[1] Although we believe this change will serve the AAD well in the future, we must be flexible about guideline generation during the coronavirus disease-2019 (COVID-19) outbreak. Like the World Health Organization, the AAD already adopted a rapid-advice guidelines protocol, but this process relies on evaluating a body of evidence, which does not yet exist for COVID-19.

To address this gap, the AAD established the COVID-19 Taskforce, which published interim guidance within 5 days of establishment. Although this advice is essential, it is by necessity made on limited and rapidly evolving evidence and must be tailored to individual patients. Issues include how to grade evidence from gray literature, risks and benefits of use of anecdotal experiences and indirect evidence, and harmonizing guidance simultaneously produced by other organizations.

The harms of potentially issuing incorrect guidance must be balanced with the ethical risks of issuing no guidance at all.[2] One example of this challenge is managing patients on immunosuppressives during COVID-19. A recent *JAAD* study examined the occurrence of upper respiratory infection (URI) for patients treated with various classes of biologic therapies for psoriasis as a proxy for risk of COVID-19 infection while on a biologic.[3]

Although we commend the authors for compiling these data, there are several issues with indirect evidence: (1) these trials compared biologics to placebo, (2) they were not powered for the outcome of URI, and (3) the similarity of COVID-19 to URI is unknown. Partly due to these concerns, the AAD COVID-19 Taskforce published interim guidance that did not distinguish among biologic classes.

Dermatology societies are not struggling alone with creating interim guidelines. In cardiology, there has been concern over the use of angiotensin-converting enzyme inhibitors due to an observational study that many patients with hypertension admitted for COVID-19 were on angiotensin-converting enzyme inhibitors.[4] In the face of uncertainty, societies, including the American College of Cardiology, took a stance to keep patients on angiotensin-converting enzyme inhibitors while they await more evidence.[5]

When guidelines can no longer be based on the highest level of evidence, then indirect studies, gray literature, case reports, and expert consensus may be the only tools left in our arsenal. We need guidance not just on biologics but also on many topics, including scaling up teledermatology programs and managing patients with invasive skin cancers. These changes to dermatology guidelines do not exist in a vacuum. Important ethical implications include patient outcomes such as missed melanomas and the loss of employment for practice staff. With so much uncertainty in our medical practice, guidance is needed now more than ever. We should acknowledge the shift from evidence-based medicine to reliance on expert guidance and appreciate the potential for guideline reversal. But in a time of rapidly changing evidence, we must be willing to take on these risks to guide with the goal of maintaining the highest standard of patient care.

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