REFERENCES

1. Argenziano G, Catricala C, Ardigo M, et al. Seven-point checklist of dermoscopy revisited. *Br J Dermatol*. 2011;164(4):785-790.
2. Lallas A, Longo C, Manfredini M, et al. Accuracy of dermoscopic criteria for the diagnosis of melanoma in situ. *JAMA Dermatol*. 2018;154(4):414-419.
3. Jaimes N, Marghoob AA, Rabinovitz H, et al. Clinical and dermoscopic characteristics of melanomas on nonfacial chronically sun-damaged skin. *J Am Acad Dermatol*. 2015; 72(6):1027-1035.
4. Bassoli S, Kyrgidis A, Ciardo S, et al. Uncovering the diagnostic dermoscopic features of flat melanomas located on the lower limbs. *Br J Dermatol*. 2018;178(3):217-218.

https://doi.org/10.1016/j.jaad.2020.08.058

Controversies in defining a surgical site infection following Mohs micrographic surgery: A literature review

To the Editor: Mohs micrographic surgery (MMS) is widely used to treat nonmelanoma skin cancer. The most frequent complication of MMS is surgical site infections (SSI),[1] with incidences ranging from 0.07% to 4.34%.[2] Variations among studies in the definition of SSI used may contribute to the wide range of rates reported.[3] The Centers for Disease Control and Prevention (CDC) has defined SSI as occurring within 30 days of a procedure and meeting at least 1 of 4 characteristics, including purulent drainage, positive wound culture, clinical criteria, or diagnosis of SSI by the surgeon/attending physician.[4] However, this definition is infrequently used in the literature.[5] The lack of a consensus definition of SSI after MMS renders the true prevalence of SSI unknown, hindering the development of informed antibiotic and infection-control guidelines. Here, we sought to review the existing literature on infection rates after MMS and variations among the criteria for SSI reported.

A PubMed search was performed by using a combination of relevant terms (Fig 1). Studies reporting SSI rates after MMS were included. A total of 402 articles were identified in the initial search. Of these, 370 were excluded from further review (Fig 1). Thus, 32 studies remained for analyses.

The criteria used to define SSI varied widely among studies. One (3.1%) study used the full CDC criteria to define SSI. Seven studies (21.9%) required a positive wound culture result to diagnose SSI, 17 (53.1%) studies used clinical criteria alone as sufficient to diagnose SSI, and 8 (25.0%) studies did not define their criteria for SSI. The length of follow-up also varied: 15 (46.9%) studies monitored SSI for 2 weeks or less; 7 (21.9%) studies monitored for at least 30 days after surgery. The prevalence of SSI varied according to the definition of SSI used. Five (71.4%) of the 7 studies requiring a positive wound culture result reported SSI rates of greater than 3%, compared to 3 (17.6%) of the 17 studies that were based on clinical criteria alone and 2 (25.0%) of the 8 studies that did not define criteria.

SSIs impart a significant burden to the health care system, warranting continued efforts at prevention. The ability to reduce rates of SSI requires an accurate understanding of their true prevalence, which can be accomplished only with a standardized definition. Our study shows lack of consistency in the definition of SSI after MMS. Moreover, there may be an association between the definition of SSI and the

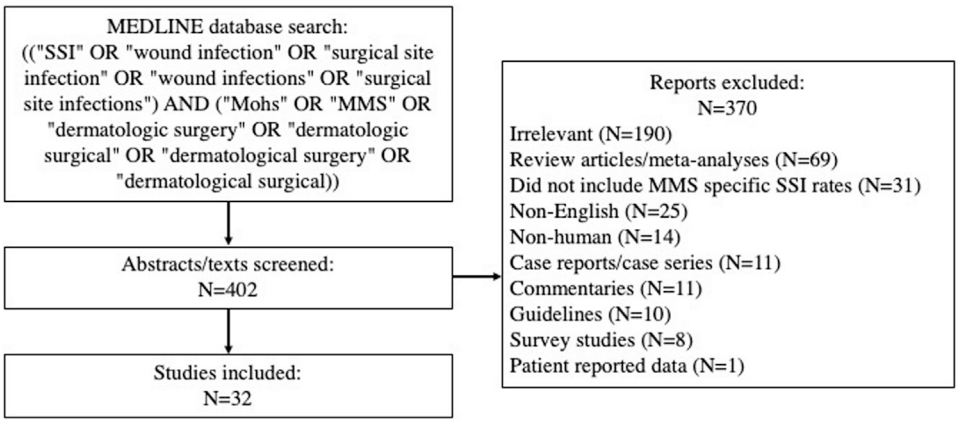

Fig 1. Literature search flow diagram. *MMS*, Mohs micrographic surgery; *SSI*, surgical site infection.

prevalence of rates reported. Other factors that also influence SSI rates (eg, prophylactic antibiotics, anatomic location, wound care practices, and patient comorbidities) were not assessed in this review, thus limiting the ability to draw conclusions in this regard.

Although widespread adoption of the CDC definition is a reasonable suggestion for future studies, this definition permits surgeons to ultimately use their own clinical judgment in defining SSI, inherently limiting its generalizability. Next steps should focus on developing a clear definition of SSI, including length of follow-up, that is not dependent on a surgeon's subjective diagnosis. Once established, future studies in the field of dermatology should use this standardized definition to allow for accurate comparisons of SSI rates among studies.

Ailish M. Hanly, BS, Vijaya T. Daniel, MD, MPH, and Bassel H. Mahmoud, MD, PhD

From the Department of Dermatology, University of Massachusetts, Worcester, Massachusetts.

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Approved.

Reprint requests: Bassel H. Mahmoud, MD, PhD, Department of Dermatology, University of Massachusetts, 281 Lincoln St, Worcester, MA 01605

E-mail: Bassel.Mahmoud-Abdallah@umassmemorial.org

REFERENCES

1. Alam M, Ibrahim O, Nodzenski M, et al. Adverse events associated with Mohs micrographic surgery: multicenter prospective cohort study of 20,821 cases at 23 centers. *JAMA Dermatol*. 2013;149:1378-1385.
2. DelMauro MA, Kalberer DC, Rodgers IR. Infection prophylaxis in periorbital Mohs surgery and reconstruction: a review and update to recommendations. *Surv Ophthalmol*. 2020;65:323-347.
3. Leaper D, Tanner J, Kiernan M. Surveillance of surgical site infection: more accurate definitions and intensive recording needed. *J Hosp Infect*. 2013;83:83-86.
4. Horan TC, Gaynes RP, Martone WJ, Jarvis WR, Emori TG. CDC definitions of nosocomial surgical site infections, 1992: a modification of CDC definitions of surgical wound infections. *Infect Control Hosp Epidemiol*. 1992;13:606-608.
5. Wilson AP, Gibbons C, Reeves BC, et al. Surgical wound infection as a performance indicator: agreement of common definitions of wound infection in 4773 patients. *BMJ*. 2004;329:720.

https://doi.org/10.1016/j.jaad.2020.08.073

Autoantibody profiles in patients' sera associated with distribution patterns of dermatomyositis skin symptoms

To the Editor: Myositis-specific autoantibodies (MSAs) were recently reported to be associated with distinctive clinical features of dermatomyositis (DM). For example, anti–transcriptional intermediary factor 1 (TIF1) γ antibody positivity is highly associated with malignancy, and serum anti-MDA5 antibody is a known marker of rapidly progressive interstitial lung disease (ILD).[1] To decide treatment approaches for patients with DM, identifying serum MSAs or myositis-associated autoantibodies (MAAs) is quite important, although convenient kits for measuring many kinds of MSAs/MAAs are not always available. Some cutaneous symptoms are known to be associated with certain MSAs/MAAs. For example, mechanic's hands and reverse Gottron sign are related to anti–aminoacyl transfer RNA synthetase (anti-ARS) and anti-MDA5 antibodies, respectively; however, they are not always apparent. We tried to find a simple new method for predicting MSA/MMA profiles in patients with DM using cluster analysis of skin symptom distribution patterns.

Skin symptoms and clinical data were retrospectively collected by unified questionnaires from 198 Japanese patients who fulfilled the criteria of Bohan and Peter[2] or those for clinically amyopathic DM.[3] Each MSA (anti–Mi-2, anti-TIF1γ, anti–MDA-5, anti-MJ, or anti-SAE) or MAA (anti-PM/Scl) was detected by in-house enzyme-linked immunosorbent assay (ELISA), and the results of the ELISA were confirmed by immunoprecipitation with recombinants.[4] Anti-ARS was tested by ELISA kits (MBL, Nagoya, Japan). Positive skin symptoms associated with each MSA/MAA are shown in Table I. We grouped skin symptoms with localization to body sites: face/scalp (heliotrope rash, facial erythema, alopecia), trunk/neck (V-neck/shawl, flagellate erythema), and extremities (Gottron sign/papule, mechanic's hands, nailfold erythema, digital ulceration). We analyzed DM skin symptoms by hierarchical clustering using an averaging method and applying the Gower distance to find similar skin symptoms or pattern groups (Supplemental Fig 1; available via Mendeley at https://doi.org/10.17632/nzsjnstn6w.1) by combinations of skin symptom–positive parts and numbers of skin symptoms. This study was approved by the Ethics Committee of our university.

The 198 patients were divided into 5 groups: clusters 1 to 5 (C1-C5), defined as in Fig 1.