



## Letters to the Editor

## A neglected outbreak in a long-term care facility: Scabies

*To the Editor:*

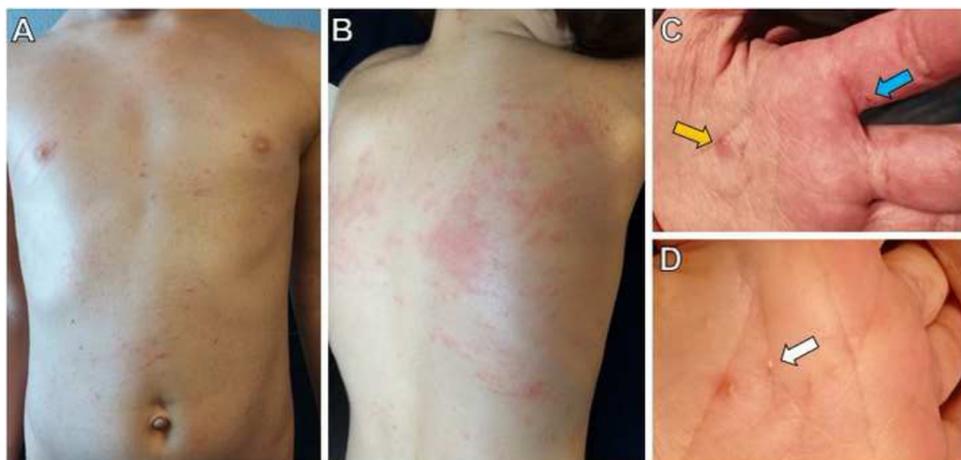
We read with interest the article by Marotta et al<sup>1</sup> titled, “Management of a family outbreak of scabies with high risk of spread to other community and hospital facilities” and support their conclusion. Here, we report the case of a 5-year-old white child presented with nocturnal itching. In this case, atopic dermatitis was treated with topical emollients and oral antihistamines (cetirizine 5 mg twice daily). No other comorbidity was present, and an improvement of the symptoms was obtained within 1 week of therapy. After discontinuation of oral antihistamines, the patient developed an intensely pruritic rash involving the chest, abdomen (Fig 1A), and trunk (Fig 1B). The therapy was started again, with partial clinical benefit. After a few days, on the left hand, a nodular lesion (Fig 1C, yellow arrow), an ulcer on the webbing of the fingers (Fig 1C, blue arrow), and a subtle linear burrow (Fig 1D, white arrow) appeared. Based on these findings, the clinical diagnosis of nodular scabies was made. Treatment with topical acaricides and supportive care permitted the resolution of itching and cutaneous manifestations.

Human scabies is an intensely pruritic skin infestation caused by the host-specific mite *Sarcoptes scabiei* var. *hominis*. After fertilization on the surface, the female mite burrows into the skin, where it lays eggs for a few days before dying. The eggs hatch within a few days, mature, and complete the cycle. The body's response to the mite, eggs, and feces causes inflammation and intense itching. Mites are not free-living and die within 1–2 days away from the body. Transmission is more usually by direct contact with an infectious case rather than by fomites. Treatment should be given to both the person who is infested and to household members.

In developed countries, scabies is observed sporadically in the family context, or as institutional outbreaks in hospitals, residential care home for older adults, and long-term care facilities (LTCFs).<sup>1,2</sup>

In this case, the possible connection of the outbreak with a nosocomial case is plausible because the grandmother of the child developed chronic itching (successfully treated with permethrin cream) while assisting her husband who is hospitalized in a LTCF. The patient admitted in the LTCF experienced an episode of itching associated with a cutaneous rash attributable to a neglected epidemic infection.

Misdiagnosis and the tendency of people to hide the symptoms caused the late recognition and underestimation of the cases, contributing to delayed control measures favoring outbreaks of disease to other communities,<sup>1</sup> as in this case, and the risk to disseminate the outbreak from hospital to school.



**Fig 1.** (A) Intensely pruritic rash involving the chest and the abdomen. (B) Intensely pruritic rash involving the trunk. (C) Nodular lesion (yellow arrow) and ulcer on the webbing of the fingers (blue arrow) on the left hand. (D) Subtle linear burrow (white arrow) on the left hand.

## References

1. Marotta M, Toni F, Dallolio L, Toni G, Leoni E. Management of a family outbreak of scabies with high risk of spread to other community and hospital facilities. *Am J Infect Control* 2018;46:808–13.
2. Cassell JA, Middleton J, Nalabanda A, Lanza S, Head MG, Bostock J, et al. Scabies outbreaks in ten care homes for elderly people: a prospective study of clinical features, epidemiology, and treatment outcomes. *Lancet Infect Dis* 2018;18:894–902.

Conflicts of interest: C.T. has received funds for speaking at symposia organized on behalf of Pfizer, Novartis, Merck, and Astellas.

Ethics approval and consent to participate: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Consent has been obtained from the parents of the patient.

Author contributions: F.S. was responsible for patient care, literature search, and writing. P.B. was responsible for patient care. C.D. was responsible for obtaining the patient's picture and performing the literature search. C.T. was responsible for writing and critical review.

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## Regarding observation of stethoscope sanitation practices in an emergency department setting



To the Editor:

I commend Vasudevan and colleagues<sup>1</sup> for their work on the direct observation of stethoscope sanitation practices in the emergency department. I do, however, have a couple concerns.

First, the authors did not account for disposable antimicrobial cover use<sup>2</sup> by physicians. Stethoscope covers act as physical barriers, which have been shown to prevent both surface contamination and transmission of microbes,<sup>3</sup> although Wood and colleagues<sup>4</sup> questioned the practical utility of antimicrobial covers in the prevention of disease transmission. Notable, a physician using these disposable covers may not have been observed cleaning the stethoscope diaphragm because it is disposable.

Second, all health care providers, regardless of specialty, should have hygienic stethoscope cleaning practices. I am curious, however, whether Vasudevan and colleagues considered examining the stethoscope

sanitation practice by physician's specialty (eg, infectious disease specialist vs psychiatrist vs surgeon). Therefore, it may be interesting and informative to assess the association between a physician's specialty and stethoscope sanitation practice.

## References

1. Vasudevan RS, Mojaver S, Chang K-W, Maisel AS, Frank Peacock W, Chowdhury P. Observation of stethoscope sanitation practices in an emergency department setting. *Am J Infect Control* 2019;47:234–7.
2. Wurzbürger I. Disposable, disposable cover for stethoscopes. Available from: <https://patents.google.com/patent/US5686706A/en>. Accessed March 6, 2019.
3. Nguyen U, Duong A. Evaluation of bioburden reduction with the use of stethoscope covers. Available from: <https://infectioncontrol.tips/2016/06/03/evaluation-of-bioburden-reduction-with-the-use-of-stethoscope-covers/>. Accessed March 6, 2019.
4. Wood MW, Lund RC, Stevenson KB. Bacterial contamination of stethoscopes with antimicrobial diaphragm covers. *Am J Infect Control* 2007;35:263–6.

Conflicts of interest: None to report.

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## Response to “Regarding observation of stethoscope sanitation practices in an emergency department setting”



To the Editor:

Thank you, Mr. Otufowora, for your criticisms. Our goal in this study was to assess stethoscope hygiene through direct observation and thus more accurately document provider stethoscope hygiene. However, given the nature of blind observation, it is difficult to account for certain details of the observed circumstances.

1. We did not observe for the use of disposable stethoscope covers, as they were not known to be available in the emergency department in which observation took place. It is possible that some providers carried these covers autonomously, but it was our judgment that this was not even remotely common in our setting; however, we did account for the use of a certain barrier precaution—the use of a sterile glove over the stethoscope diaphragm. We concur that physical barrier precautions in the form of disposable covers would be an effective form of stethoscope hygiene, but hospitals need to enforce this method of hygiene in order for it to be commonplace. Recent literature has questioned the effectiveness of antiseptic methods of stethoscope hygiene. One study has investigated the resistance of certain microbes to 70% isopropyl alcohol