Occupational Scabies in Healthcare Workers

To the Editor:

We would like to share with you our experiences with an outbreak of scabies among healthcare workers (HCWs), especially because they differ from and add to the experiences described by Pasternak et al.[1]

The outbreak of scabies described by Pasternak et al[1] clearly demonstrates the ability of Norwegian scabies to be transmitted by brief skin-skin contact and (in their case) contact with clothing or bed linen, especially if working conditions and laundry services are compromised.

In contrast to Sao Paulo, where scabies seems to be a frequent parasitosis in the community, patients with (especially Norwegian) scabies hardly are seen at our hospital. We experienced an outbreak of scabies among HCWs at our university hospital (where working conditions and laundry service are no problem) due to a wrong diagnosis. During an ICU hospitalization of an 84-year-old woman receiving long-term corticosteroid treatment for chronic autoimmune vasculitis, the patient was seen several times by a dermatologist, but initially was not diagnosed with scabies. During her hospitalization, the woman shared rooms with 14 other patients and had contact with 49 HCWs. Twelve of 40 nurses and 2 of 9 physicians who had contact with the patient developed scabies. The attack rate of nosocomial scabies among HCWs was ***28.6%.*** Overall, 26 (53.1%) of 49 HCWs received treatment, including 12 prophylactically treated persons. Among the significant others of the HCWs, scabies was proven in three and six received preventive treatment. The low rate of transmission to other patients probably was due to good compliance with infection control guidelines (especially use of barrier methods and handwashing between patients) and the fact that the transmission of mites from a HCW with typical scabies to a patient generally is low.

The outbreak could occur since the "atypical" clinical presentation (no prominent itching) and skin manifestation (hyperkeratosis due to abnormal host immune response) in the index patient were not recognized or diagnosed during her hospital stay. In countries with a low incidence of scabies in the community, scabies may be a rare event among hospital patients, although recently outbreaks of scabies originating from acquired immunodeficiency syndrome (AIDS) patients were reported.[2-4] Incorrect initial diagnosis of Norwegian scabies seems to be a major problem and was reported in 55% of the cases in a review.[4] In countries like Germany or The Netherlands, controlling occupationally acquired scabies therefore depends first of all on the hospital staff being alert to the possibility of infection among patients, and an early and accurate diagnosis. Once the problem was known, the infection control guidelines and the treatment of affected patients and staff proved efficient to control the outbreak.

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The authors reply.

We thank Dr. Voss and Dr. Wallrauch for their comments on our article. We would like to point out the fact that common scabies is a rather frequent finding in Sao Paulo, but keratotic scabies is not. We agree that Norwegian scabies can be misdiagnosed. Indeed, our probable index case caused a disagreement between our dermatology service and the infection control nurse-she strongly suspected keratotic scabies, but the dermatologist was not so sure, and that was the reason to biopsy the patient. Our experience with run-of-the-mill scabies is that usually it does not cause secondary cases in the hospital, in contrast to keratotic scabies; the worldwide experience with this form of the disease shows its potential to cause wide epidemics. We agree that hospital staff should be alert to the diagnosis of keratotic scabies; drug addicts, homeless persons, and AIDS patients certainly are persons at risk for keratotic scabies, and they exist in Sao Paulo, The Netherlands, and Germany. We note that universal precautions should prevent epidemic scabies but did not, in our hospital or in the epidemic described by Dr. Voss, suggesting again that healthcare workers do not always follow them-or that, as currently done, they are not enough to prevent these outbreaks. We have the same problem in educating HCWs to always wash their hands between patients and use barrier methods with possibly infected skin lesions here in Sao Paulo and in other places.

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