

Understanding Scabies: Causes, Symptoms and Treatment Options

Zeynep Memik*

Department of Infectious Diseases, Central Michigan University, Mt Pleasant, USA

Abstract

Scabies, a skin infestation caused by the microscopic *Sarcoptes scabiei* mite, can be an uncomfortable and distressing condition. Scabies is primarily caused by the *Sarcoptes scabiei* mite, a tiny arachnid that burrows into the outer layer of the skin. The infestation occurs through direct, prolonged skin-to-skin contact with an infected person. Contrary to common belief, scabies is not solely associated with poor hygiene, as it can affect individuals of any socio-economic background. The hallmark symptom of scabies is relentless itching, often worsening at night. The itching is the body's allergic reaction to the mites, their eggs and their waste. Small, raised red bumps or pimple-like rashes may appear on the skin, especially in areas with thinner skin, such as between the fingers, wrists, elbows and genital region.

Keywords: Scabies • Invisible infestation • Bacterial infections

Introduction

In some cases, thin, thread-like burrows may be visible on the skin. These are the tunnels created by the female mites as they lay eggs beneath the skin's surface. Scratching the affected areas can lead to open sores, increasing the risk of bacterial infections. Effective treatment of scabies involves targeting both the mites and the symptoms they cause. Topical creams containing permethrin or oral medications like ivermectin are the primary treatments. These prescription medications kill the mites and their eggs. It's essential to follow the prescribed treatment regimen to ensure complete eradication. Over-the-counter or prescription antihistamines can help alleviate itching [1]. However, they do not eliminate the mites and should be used in conjunction with specific scabies treatments. In some cases, doctors may prescribe topical steroids to reduce inflammation and ease itching.

Preventing scabies involves practicing good hygiene and avoiding close contact with infected individuals. Launder all bedding, clothing and personal items in hot water to kill any mites. Infected individuals should avoid close contact with others until the treatment is complete to prevent the spread of scabies. Thoroughly clean and vacuum the home, focusing on areas where the infested person spends time. If you suspect scabies or experience persistent itching and skin irritation, consult a healthcare professional. Early diagnosis and treatment are crucial to prevent the spread of the infestation and potential complications. Scabies, often referred to as the "invisible infestation," is a parasitic skin condition caused by the *Sarcoptes scabiei* mite [2,3]. Despite its diminutive size, this microscopic arachnid can wreak havoc on the skin, leading to discomfort and persistent itching. In this comprehensive guide, we delve into the intricacies of scabies, exploring its causes, symptoms, diagnosis and treatment options.

***Address for Correspondence:** Zeynep Memik, Department of Infectious Diseases, Central Michigan University, Mt Pleasant, USA, E-mail: zeynepmemik@gmail.com

Copyright: © 2023 Memik Z. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 02 December, 2023, Manuscript No. jid-23-123173; **Editor Assigned:** 04 December, 2023, Pre QC No. P-123173; **Reviewed:** 18 December, 2023, QC No. Q-123173; **Revised:** 23 December, 2023, Manuscript No. R-123173; **Published:** 30 December, 2023, DOI: 10.37421/2684-4559.2023.7.243

Description

The *Sarcoptes scabiei* mite is the instigator behind scabies. Measuring a mere 0.3 to 0.4 millimeters, this eight-legged creature burrows into the upper layer of the skin, creating a network of tunnels to lay its eggs. Contrary to popular belief, scabies is not a reflection of poor hygiene; anyone, regardless of cleanliness, can fall victim to this invisible infestation. Scabies spreads through direct, prolonged skin-to-skin contact with an infected person. This contact can occur during intimate activities, but it's not limited to that. Close living conditions, crowded environments and even handshake greetings can facilitate the transfer of these stealthy mites. Identifying scabies goes beyond the naked eye, as the mites burrow beneath the surface of the skin. The hallmark of scabies is relentless itching, particularly at night. The itching is an allergic reaction to the mites, their eggs and their waste. Small, red bumps resembling hives or pimples may appear, often accompanied by a rash. Thin, wavy lines on the skin represent the tunnels created by the female mites as they deposit eggs. Scratching the affected areas can lead to open sores, increasing the risk of bacterial infections.

Diagnosing scabies can be challenging due to its invisible nature. Healthcare professionals often rely on clinical symptoms, patient history and sometimes microscopic examination of skin scrapings to confirm the presence of mites or their eggs. Eliminating scabies requires targeted treatment to eradicate the mites and alleviate symptoms. Topical creams containing permethrin or oral medications like ivermectin are prescribed to kill the mites. Over-the-counter or prescription antihistamines help manage itching, providing relief during the healing process [4,5]. Laundering bedding, clothing and personal items in hot water, vacuuming living spaces and isolating infected individuals are essential to prevent reinfestation. Understanding the transmission dynamics of scabies is crucial for prevention. Practicing good hygiene, avoiding close contact with infected individuals and promptly treating identified cases contribute to breaking the cycle of transmission.

Conclusion

Understanding scabies involves recognizing its causes, symptoms and available treatment options. While scabies can be uncomfortable, prompt and proper medical intervention can effectively eliminate the infestation and alleviate symptoms. Practicing good hygiene and taking preventive measures are key components of managing and controlling scabies, contributing to overall skin health and well-being. If you suspect scabies, seek professional medical advice for an accurate diagnosis and tailored treatment plan. Scabies, the invisible infestation, demands attention to detail and a keen understanding

of its nuances. While these microscopic mites may be challenging to detect, awareness of the symptoms, transmission methods and treatment options empowers individuals to combat this stealthy skin condition. Seeking prompt medical attention, practicing preventive measures and fostering community awareness are integral components of managing and ultimately overcoming the invisible infestation known as scabies.

Acknowledgement

None.

Conflict of Interest

None.

References

1. Dinos, George P. "The macrolide antibiotic renaissance." *Br J Pharmacol* 174 (2017): 2967-2983.
2. Kolar, Stacey L., J. Antonio Ibarra, Frances E. Rivera and Joe M. Mootz, et al. "Extracellular proteases are key mediators of *Staphylococcus aureus* virulence via the global modulation of virulence-determinant stability." *Microbiologyopen* 2 (2013): 18-34.
3. Sumitomo, Tomoko, Masanobu Nakata, Miharu Higashino and Yutaka Terao, et al. "Group A streptococcal cysteine protease cleaves epithelial junctions and contributes to bacterial translocation." *J Biol Chem* 288 (2013): 13317-13324.
4. Intorasoot, Amornrat, Piyaorn Chornchoem, Siriwoot Sookkhee and Sorasak Intorasoot. "Bactericidal activity of herbal volatile oil extracts against multidrug-resistant *Acinetobacter baumannii*." *J Intercult Ethnopharmacol* 6 (2017): 218.
5. Rooijackers, Suzan HM, Fin J. Milder, Bart W. Bardoel and Maartje Ruyken, et al. "Staphylococcal complement inhibitor: Structure and active sites." *J Immunol* 179 (2007): 2989-2998.

How to cite this article: Memik, Zeynep. "Understanding Scabies: Causes, Symptoms and Treatment Options." *Clin Infect Dis* 7 (2023): 243.