Scabies

This is a PDF version of the following document:
Module 1: STD Question Bank
Lesson 24: Scabies

You can always find the most up-to-date version of this document at https://www.std.uw.edu/go/2021-guidelines/ectoparasitic-infections/core-concept/all.

References

- Anderson AL, Chaney E. Pubic lice (*Pthirus pubis*): history, biology and treatment vs. knowledge and beliefs of US college students. Int J Environ Res Public Health. 2009;6:592-600. [PubMed Abstract] -
- Anderson KL, Strowd LC. Epidemiology, Diagnosis, and Treatment of Scabies in a Dermatology Office. J Am Board Fam Med. 2017 1/2;30:78-84. [PubMed Abstract] -
- Belvisi V, Orsi GB, Del Borgo C, et al. Large Nosocomial Outbreak Associated with a Norwegian Scabies Index Case Undergoing TNF-α Inhibitor Treatment: Management and Control. Infect Control Hosp Epidemiol. 2015;36:1358-60. [PubMed Abstract] -
- Bernigaud C, Fang F, Fischer K, et al. Preclinical Study of Single-Dose Moxidectin, a New Oral Treatment for Scabies: Efficacy, Safety, and Pharmacokinetics Compared to Two-Dose Ivermectin in a Porcine Model. PLoS Negl Trop Dis. 2016;10:e0005030. [PubMed Abstract] -
- Burkhart CG, Burkhart CN. Oral ivermectin for *Phthirus pubis*. J Am Acad Dermatol. 2004;51:1037-8. [PubMed Abstract] -
- Campbell JJ, Paulson CP, Nashelsky J. Clinical Inquiry: What is the most effective treatment for scabies? J Fam Pract. 2017;66:E11-E12. [PubMed Abstract] -
- Chosidow O, Fuller LC. Scratching the itch: is scabies a truly neglected disease? Lancet Infect Dis. 2017;17:1220-1221. [PubMed Abstract] -
- Chosidow O. Clinical practices. Scabies. N Engl J Med. 2006;354:1718-27. [PubMed Abstract] -
- Cook AM, Romanelli F. Ivermectin for the treatment of resistant scabies. Ann Pharmacother. 2003;37:279-81. [PubMed Abstract] -

- Currie BJ, McCarthy JS. Permethrin and ivermectin for scabies. N Engl J Med. 2010;362:717-25. [PubMed Abstract] -
- Dhana A, Yen H, Okhovat JP, Cho E, Keum N, Khumalo NP. Ivermectin versus permethrin in the treatment of scabies: A systematic review and meta-analysis of randomized controlled trials. J Am Acad Dermatol. 2018;78:194-198. [PubMed Abstract] -
- Dohvoma VA, Ebana Mvogo SR, Atangana PJA, Nyasse P, Epee E, Ebana Mvogo C. *Phthirus pubis* Infestation of the Eyelids Presenting as Chronic Blepharoconjunctivitis in a 6-Year-Old Girl: A Case Report. Case Rep Ophthalmol. 2018;9:30-34. [PubMed Abstract] -
- Elosua-González M, García-Zamora E. Crusted Scabies. N Engl J Med. 2017;377:476. [PubMed Abstract] -
- Flinders DC, De Schweinitz P. Pediculosis and scabies. Am Fam Physician. 2004;69:341-8. [PubMed Abstract] -
- Fuentes-Suárez A, González-Márquez TN. "Acrobatic" Lice. N Engl J Med. 2017;377:e19. [PubMed Abstract] -
- Gunning K, Pippitt K, Kiraly B, Sayler M. Pediculosis and scabies: treatment update. Am Fam Physician. 2012;86:535-41. [PubMed Abstract] -
- Huffam SE, Currie BJ. Ivermectin for *Sarcoptes scabiei* hyperinfestation. Int J Infect Dis. 1998;2:152-4. [PubMed Abstract] -
- Johnstone P, Stong M. Scabies. Am Fam Physician. 2015;92:919-20. [PubMed Abstract] -
- Koch E, Clark JM, Cohen B, et al. Management of head louse infestations in the United States—a literature review. Pediatr Dermatol. 2016;33:466-72. [PubMed Abstract] -
- Leone PA. Scabies and pediculosis pubis: an update of treatment regimens and general review. Clin Infect Dis. 2007;44 Suppl 3:S153-9. [PubMed Abstract] -
- Marin-Cabanas I, Pascual JC. Image Gallery: Dermoscopy of phthiriasis pubis: a handy and useful tool. Br J Dermatol. 2016;175:e94. [PubMed Abstract] -
- Micali G, Lacarrubba F, Verzì AE, Chosidow O, Schwartz RA. Scabies: Advances in Noninvasive Diagnosis. PLoS Negl Trop Dis. 2016;10:e0004691. [PubMed Abstract] -
- Ortega-Loayza AG, McCall CO, Nunley JR. Crusted scabies and multiple dosages of ivermectin. J Drugs Dermatol. 2013;12:584-5. [PubMed Abstract] -
- Roberts LJ, Huffam SE, Walton SF, Currie BJ. Crusted scabies: clinical and immunological findings in

seventy-eight patients and a review of the literature. J Infect. 2005;50:375-81.
[PubMed Abstract] -

- Romani L, Whitfeld MJ, Koroivueta J, et al. Mass Drug Administration for Scabies Control in a Population with Endemic Disease. N Engl J Med. 2015;373:2305-13.
[PubMed Abstract] -

- Salavastru CM, Chosidow O, Boffa MJ, Janier M, Tiplica GS. European guideline for the management of scabies. J Eur Acad Dermatol Venereol. 2017;31:1248-1253.
[PubMed Abstract] -

- Salavastru CM, Chosidow O, Janier M, Tiplica GS. European guideline for the management of pediculosis pubis. J Eur Acad Dermatol Venereol. 2017;31:1425-1428.
[PubMed Abstract] -

- Shimose L, Munoz-Price LS. Diagnosis, prevention, and treatment of scabies. Curr Infect Dis Rep. 2013;15:426-31.
[PubMed Abstract] -

- Wendel K, Rompalo A. Scabies and pediculosis pubis: an update of treatment regimens and general review. Clin Infect Dis. 2002;35:S146-51.
[PubMed Abstract] -

- Workowski KA, Bolan GA; Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. Ectoparasitic infections. MMWR Recomm Rep. 2015;64(No. RR-3):1-137.
[2015 STD Treatment Guidelines] -

Table 1. 2021 STI Treatment Guidelines: Ectoparasitic Infections
Treatment of Scabies

Note: lindane was previously recommended as an alternative treatment for scabies, but lindane has been discontinued in the United States due to risk of neurotoxicity.

Recommended for Treatment of Scabies
Permethrin 5% cream *applied to all areas of the body from the neck down and washed off after 8–14 hours*

Recommended for Treatment of Scabies
Ivermectin *200 µg/kg body weight orally, repeated in 14 days**
Note: *Oral ivermectin has limited ovicidal activity; a second dose is required for eradication.

Recommended for Treatment of Scabies
Ivermectin 1% cream *applied to all areas of the body from the neck down and washed off after 8–14 hours^*
Note: ^Repeat treatment in 1 week if symptoms persist

Source: Workowski KA, Bachmann LH, Chan PA, et al. Sexually transmitted infections treatment guidelines, 2021. Ectoparasitic infections. MMWR Recomm Rep. 2021;70(No. RR-4):1-187. [2021 STI Treatment Guidelines]

Table 2. 2015 STD Treatment Guidelines: Ectoparasitic Infections
Treatment of Crusted Scabies

Substantial treatment failure might occur with a single-dose topical scabicide or with oral ivermectin treatment. Combination treatment is recommended.

Recommended for Treatment of Crusted Scabies

Permethrin 5% cream *topical, full-body application to be repeated daily for 7 days then 2 times per week until cure*	+	**Ivermectin** *200 ug/kg body weight on days 1, 2, 8, 9, and 15*

Note: Additional ivermectin treatment on days 22 and 29 might be required for severe cases

Recommended for Treatment of Crusted Scabies

full-body application to be repeated daily for 7 days then 2x weekly until discharge or cure	+	**Ivermectin** *200 ug/kg body weight on days 1, 2, 8, 9, and 15*

Note: Additional ivermectin treatment on days 22 and 29 might be required for severe cases

Lindane should be avoided because of the risks for neurotoxicity with heavy applications or denuded skin