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Treatment of Scabies with Albendazole

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Scabies is a highly communicable disease caused by infestation with *Sarcoptes scabiei* var. *hominis*. Current treatments for scabies include benzyl benzoate, malathion, lindane and permethrin in addition to ivermectin [1]. The latter represents the only approved oral treatment for scabies and the therapeutic option for community-based treatment. Scabies outbreaks remain a serious public health issue in Lebanon, and the failures of topical treatment modalities prove challenging to manage, given the unavailability of ivermectin in our country. We report 2 patients with scabies who were successfully treated with oral albendazole.

Observations

Case 1. A 63-year-old woman presented clinical evidence of crusted scabies. Diagnosis was ascertained by skin scrapings positive for *S. scabiei*. Several head-to-toe applications of benzyl benzoate and lindane had been ineffective 2 months earlier. The patient was prescribed a daily dose of 1,000 mg of albendazole with fatty meals for 3 consecutive days and an application of a 5% salicylic acid ointment once daily for 1 week. The pruritus disappeared within 5 days. Skin scrapings performed at the 1-week control visit on residual skin lesions did not reveal any *Sarcoptes* mites. Lesions disappeared completely within 10 days. No side effects or recurrence were observed during 3 months of follow-up.

Case 2. A 76-year-old man with Alzheimer's disease who had previously been treated with topical benzyl benzoate and permethrin had extensive scabies. Skin scraping revealed live Sarcoptes. The patient was administered 3 daily doses of 1,000 mg of albendazole along with fatty meals. Skin lesions disappeared within 1 week. No recurrence was observed during the 2 months of follow-up.

Comments

Benzimidazoles (albendazole, fenbendazole, oxfenbendazole, mebendazole, thiabendazole) are broad antiparasitic agents used against a wide range of nematodes and cestodes. By binding to free β-tubulin, benzimidazoles inhibit the polymerization of tubulin and the microtubule-dependant glucose uptake, leading to parasitic death. These agents may additionally interfere with the synaptic transmission of parasites through a probable cholinergic effect [2]. Effectiveness of oral and topical thiabendazole against scabies has been pointed out in few reports since the 1960s [3, 4], and thiabendazole and the newer agent albendazole have been successfully used against pediculosis capitis [2, 5]; yet little attention has been paid to the antiscables properties of benzimidazoles, given the limited experience with these drugs in this setting. Our observations represent, to our knowledge, the first cases of scabies successfully treated with oral albendazole and suggest that this agent provides a potential therapeutic option for scabies. Further evaluation of the effectiveness of albendazole against scabies is necessary.

References

- 1 Chosidow O: Clinical practises. Scabies. N Engl J Med 2006;354:1718–
- 2 Namazi MR: Treatment of pediculosis capitis with thiabendazole: a pilot study. Int J Dermatol 2003;42:973–976.
- 3 Hernandez-Perez E: Topically applied thiabendazole in the treatment of scabies. Arch Dermatol 1976;112:1400–1401.
- 4 Allegre T, Cailleres S, Lota I, et al: Value of thiabendazole in scabies resistant to local treatment in HIV infected patients. Presse Med 1992; 21:1821–1822.
- 5 Akisu C, Delibas SB, Aksoy U: Albendazole: single or combination therapy with permethrin against pediculosis capitis. Pediatr Dermatol 2006;23:179–182.

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