

# Letters to the Editor

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## Additional Techniques for Diagnosing Scabies

**Original Article:** Pediculosis and Scabies: A Treatment Update

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TO THE EDITOR: This article did not mention a valuable technique to assist in the diagnosis of scabies: the ink burrow test.<sup>1,2</sup> When ink is applied over suspect skin areas, it is absorbed where mite burrows exist under the skin. Wiping away superficial ink reveals remaining ink that has penetrated the burrows.

Also, microscopic identification of mites, eggs, and fecal pellets can be performed by suspending skin scrapings in mineral oil.<sup>3</sup> Mites will adhere to the oil, and skin scales will mix with the oil. Refractility differences will be greater between the mite and the oil. The oil will not dissolve fecal pellets. Although there are studies describing the use of potassium hydroxide (KOH) instead of mineral oil,<sup>4</sup> KOH can dissolve fecal pellets, thereby hindering the identification of *Sarcoptes scabiei*.<sup>5,6</sup> For this reason, mineral oil is preferred over a KOH solution.

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IN REPLY: We appreciate the mention of ink burrow testing for the diagnosis of scabies. Also known as the burrow ink test, this method consists of rubbing the underside of a cartridge pen on a suspected scabies papule, and then wiping off the excess ink with an alcohol pad. Although the cartridge pen (with free-flowing ink) is a simple and inexpensive tool, ballpoint pens are more common in the United States, which limits the practicality of this test because of the scarcity of cartridge pens. Additionally, although the test appears to be a valid diagnostic tool, a prolonged search is occasionally required to find the positive lesion even in patients in whom scabies is strongly suspected.<sup>1</sup> Because a lengthy examination may be impractical in the busy office setting, we recommended empiric treatment of patients with pruritus, typical lesions, and a history of itching in close contacts.<sup>2</sup>

We agree that mineral oil is superior to KOH preparations for the microscopic examination of skin scrapings in the diagnosis of scabies, and included recommendations to use mineral oil when testing is indicated.

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