Ivermectin Lotion (Sklice) for Head Lice

JESSICA EARLY, MD, and HONOR MACNAUGHTON, MD, Tufts University Family Medicine Residency at Cambridge Health Alliance, Malden, Massachusetts

Ivermectin 0.5% lotion (Sklice) is a prescription ovicidal pediculicide labeled for the topical treatment of head lice in patients six months and older.1

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dosage</th>
<th>Dose form</th>
<th>Cost of full course*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ivermectin 0.5% lotion (Sklice)</td>
<td>A single 4-oz (117-g) tube</td>
<td>Lotion (each gram of lotion contains 5 mg of ivermectin)</td>
<td>$280</td>
</tr>
</tbody>
</table>

*—Estimated retail price of one full course of treatment based on information obtained at http://www.goodrx.com (accessed April 24, 2014).

SAFETY

There have been no reports of serious adverse reactions with the use of topical ivermectin in a limited number of patients (i.e., fewer than 400).1,2 Ivermectin 0.5% lotion does not have the neurotoxicity concerns of lindane or the flammability concerns of malathion (Ovide).2,3 The safety of the lotion has not been established in patients younger than six months, and use in this age group is not recommended because of the potential risk of increased systemic absorption and ivermectin toxicity.1 Topical ivermectin is classified as a U.S. Food and Drug Administration pregnancy category C drug, and its excretion in breast milk has not been studied.1

TOLERABILITY

Topical ivermectin is well tolerated. The most common adverse effects are rare and include ocular irritation (0.5%) and burning sensation of the skin (0.3%).2 To date, no studies have compared the acceptability of topical ivermectin with other pediculicides.

EFFECTIVENESS

A single application of topical ivermectin will result in significantly more patients being louse-free the day following treatment (94.9% vs. 31.3% for placebo).2 Two patients must be treated with topical ivermectin compared with placebo for one to be louse-free the day after treatment (number needed to treat = 2).2 Topical ivermectin also kills nits, and approximately three out of four children will be louse-free two weeks after the single treatment (number needed to treat = 2 to 4).2 Although there have been no direct comparisons, this is similar to the effectiveness of spinosad suspension (Natroba) and benzyl alcohol lotion (Ulesfia).4,5

PRICE

A single treatment of ivermectin lotion (one 4-oz tube) costs approximately $280. The cost of other prescription topical treatments is $60 for benzyl alcohol, $70 to $140 for malathion, and $90 to $180 for spinosad suspension. Nonprescription therapies, such as permethrin lotion (Nix) or pyrethrin/piperonyl butoxide shampoo (Rid), cost approximately $10 per treatment (one 2-oz bottle).

SIMPLICITY

Nit combing is not required with topical ivermectin. Treatment involves a single application of one 4-oz tube of lotion to coat dry hair and scalp for 10 minutes before rinsing.
off with water. Eye contact should be avoided. Treatment should be administered with other lice elimination measures, such as washing recently worn clothing, hats, bedding, towels, brushes, and combs in hot water.1

Bottom Line
Topical ivermectin is safe, effective, and easy to administer because it involves only a single application-rinse cycle and does not require nit combing. However, it is significantly more expensive than nonprescription treatments and its benefits may not be worth the cost for most patients.

Address correspondence to Jessica Early, MD, at jearly@challiance.org. Reprints are not available from the authors.

Author disclosure: No relevant financial affiliations.

REFERENCES