not associated with the recalled product.

Several theories have been proposed to explain the sudden increased incidence of *Fusarium* keratitis in contact lens wearers, and these were discussed at the 2006 American Academy of Ophthalmology annual meeting. These theories included the possible loss of antimicrobial activity during contact lens storage, and the selective growth of *Fusarium* in globsules of partially dried deposits of ReNu with MoistureLoc. In addition, because the contact lens solutions on the market are composed of different disinfectants and antimicrobial agents, it is possible that there is a generalized decreased effectiveness of all-in-1 solutions to kill *Fusarium* compared with previous disinfecting systems. It is also possible that *Fusarium* has a propensity to bind to different contact lens materials. Further research is needed, especially into theories involving other possible contact lens solutions besides ReNu with MoistureLoc, so that this outbreak can be better understood and controlled.

In summary, it appears that the *Fusarium* keratitis outbreak may not be finished, and that this condition may be associated with other contact lens cleaning solutions. Ophthalmologists should be aware of this and must therefore continue to be vigilant in suspecting this infection. Any suspicious infiltrate should be scraped for culture, and prompt appropriate antifungal therapy should be instituted.

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Financial Disclosure: None reported.

Funding/Support: Supported in part by a Research to Prevent Blindness Challenge Grant (Drs Jeng and Meisler).

Previous Presentation: Presented in part at the Federated Societies Scientific Session; November 10, 2006; Las Vegas, Nevada.

7. Stulting RD. Microbiology of environmental specimens and a hypothesis to explain contact lens-related Fusarium keratitis. Paper presented at: Federated Societies Scientific Session; November 10, 2006; Las Vegas, NV.

Sentinel lymph node biopsy, introduced by Morton et al, is a mode of early detection of regional lymph node metastasis for many variants of solid tumors. Prognostically, these data correlate more closely with melanoma-related mortality than other histologic data. Perineural invasion of cutaneous eyelid melanoma is uncommon; neither Dr Char nor William Hoyt, MD (oral communication, May 2005) have seen a case without marked sensory asymmetry. Our case provides a cautionary note regarding both sentinel lymph node biopsy and physical findings associated with perineural invasion.

Report of a Case. A 20-year-old woman had delayed diagnosis of a left medial eyelid malignant melanoma. The patient was examined elsewhere at age 14 years for a red, acniform papule and was followed up for 6 years. During the past year, she experienced periorcular shooting pain 1 to 2 times daily and received 2 intralesional corticosteroid injections without regression. The lesion was biopsied elsewhere, revealing melanoma with dimensions of 1.5×1.3 cm. Suboptimal processing limited histologic interpretation.

On our examination, there was a linear scar with mild erythema in the left lower eyelid. Sensation in the distribution of the fifth cranial nerve first division (V1) and the fifth cranial nerve second division (V2) was symmetric. Extraocular movements were intact. Results of a metastatic evaluation were negative. We performed a wide local excision of the lesion with sentinel lymph node biopsy. The sentinel node drainage was to the left submandibular node and the biopsy results were negative. The area was resected and the tumor appeared to be removed with clear margins. Pathological analysis revealed residual melanoma 3.3 mm in thickness. The lesion had invaded the subcutaneous component and was at Clark level V. Examination results of the inferior medial and superior lateral margins were negative, as were those of the deep margins. The inferolateral margin

### Eyelid Melanoma With Negative Sentinel Lymph Node Biopsy and Perineural Spread

Evaluation and treatment of periorcular melanomas can be difficult.

### Table 2. Minimum Inhibitory Concentrations of Various Antifungal Medications to the *Fusarium* species Found in Each Patient’s Corneal Culture

<table>
<thead>
<tr>
<th>Antifungal Medication</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natamycin</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Amphotericin B</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Itraconazole</td>
<td>&gt;8</td>
<td>&gt;8</td>
<td>&gt;8</td>
<td>&gt;8</td>
</tr>
<tr>
<td>Voriconazole</td>
<td>8</td>
<td>&gt;8</td>
<td>&gt;8</td>
<td>8</td>
</tr>
</tbody>
</table>

*Minimum inhibitory concentration is given in micrograms per milliliter.*

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was 2 mm and showed a 1-mm area of a contiguous microsatellite, a moderate mitotic rate (5-10 mitoses per high-power field), and a moderate number of tumor-infiltrating lymphocytes.

Unfortunately, the patient continued to experience periocular pain following resection. Magnetic resonance imaging showed tumor involvement of the infraorbital nerve (Figure 1). Orbital computed tomography showed that the infraorbital V2 canal was 8 times the normal size and that the tumor extended at least to the orbital apex. Biopsy results of the infraorbital nerve were positive for melanoma (Figure 2). The patient underwent a wide resection of the melanoma with additional resection of the floor of the orbit and infraorbital nerve as well as partial maxillectomy.

Comment. Cutaneous tumors of the eyelid rarely spread via a perineural route. Pain is the most common symptom, accompanied by sensory loss in affected nerves, dysesthesia, and ophthalmoplegia. Sentinel lymph node biopsy is the best technique to predict local melanoma recurrence; however, in cases involving perineural spread, this procedure probably has much lower sensitivity. Our case is unusual in at least 2 respects. First, the initial sentinel lymph node biopsy results were negative. Second, the patient lacked the typical symptoms of perineural involvement. While this case is a rare example of malignant cutaneous melanoma both in its manifestation and clinical course, it underscores limitations of tumor staging using sentinel lymph node biopsy.

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Financial Disclosure: None reported.