Surgilube being water based and Hibiclens being a detergent. The detergent may enable the toxin to penetrate deeper into the cornea.

We believe that these are the first reported cases of Surgilube use on the ocular surface. Because of the common use of Surgilube in the hospital setting and the similar appearance to certain ocular medications, it is unlikely that this is the first actual time its mistaken use has occurred. It is important to correctly identify any medication being used on the ocular surface. It is also important to identify which medications are safe for use in the eye and not to use medications that do not have this designation. Although the patients in our case reports regained good vision, one patient was left with corneal haze and the other with chronic dry eye irritation. Due to the slow reepithelialization of the cornea, infectious keratitis and loss of visual acuity are possible.

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Conjunctival Squamous Cell Carcinoma Harboring Leishmania Amastigotes in a Human Immunodeficiency Virus–Positive Patient

Leishmaniasis, a protozoal infection transmitted via the sand fly bite, is endemic to India, the Middle East, and Africa and is periodically found in Central and South America. Visceral leishmaniasis, also known as kala-azar, black fever, or Dumdum fever, is the most severe form. Ocular involvement occurs more frequently in cutaneous than in mucocutaneous and visceral manifestations. We report a unique case of Leishmania donovani chagasi identified by biopsy of squamous cell carcinoma (SCC) of the bulbar conjunctiva in a human immunodeficiency virus (HIV)–positive Hispanic man. Subsequent evaluation revealed kala-azar with histopathological confirmation of the organism in conjunctiva, lacrimal gland, and liver specimens.

Report of a Case. A 39-year-old HIV-positive Guatemalan man had decreased vision, epiphora, and pain in the right eye for 18 months. He had been continuously maintained on highly active antiretroviral therapy, azithromycin, and sulfamethoxazole/trimethoprim for 2 years. He denied fever, sweating, or flulike symptoms.

Best-corrected visual acuity was 20/25 OD and 20/20 OS. The pupils were 5 mm on the right and 7 mm on the left, briskly reactive to light, and without relative afferent pupil defect. Extraocular movements were full without restriction. Intraocular pressures were 17 mm Hg in both eyes. The right upper eyelid was mildly ptotic and swollen. The slitlamp biomicroscopic appearance is shown in Figure 1A. Funduscopic examination results were unremarkable. Ultrasound biomicroscopy and B-mode ultrasonography of the globe did not suggest extension into deeper structures or transscleral invasion.

Computed tomography of the orbit revealed disease limited to preseptal soft tissue. Laboratory evaluation demonstrated a viral load of less than 48 copies/mL and a CD4 lymphocyte count of 79 cells/µL. Excision biopsy of the mass showed moderately differentiated invasive SCC as well as intracellular microorganisms in histiocytes (Figure 1B). Special stains for Histoplasma and Toxoplasma were negative.

High-power oil immersion highlighted the Leishmania amastigotes (Figure 1C), and CD68-positive histiocytes containing organisms (immunoperoxidase reaction, original magnification ×1000).

Figure 1. Clinical photograph and photomicrographs. A, Right conjunctival mass, with a yellow gelatinous temporal lesion extending from the 9-o'clock position to the 12-o'clock position with associated symblepharon and feeder vessels. B, Invasive squamous cell carcinoma, moderately differentiated (hematoxylin-eosin, original magnification ×400). C, Conjunctival squamous cell carcinoma and Leishmania amastigotes in histiocytes (hematoxylin-eosin, original magnification ×1000). D, CD68-positive histiocytes containing organisms (immunoperoxidase reaction, original magnification ×1000).
Postoperative positron emission tomography showed increased uptake within the right lateral conjunctiva, liver, spleen, and axillary, mediastinal, mesenteric, pelvic, and cervical lymph nodes. Abdominal computed tomography revealed hepatosplenomegaly (Figure 2). A subsequent liver biopsy confirmed the diagnosis of visceral leishmaniasis. The patient was treated with intravenous liposomal amphotericin B (190 mg/d for 14 days and triweekly thereafter).

Comment. In HIV-infected individuals, SCC occurs at an earlier age and may be more aggressive than in immunocompetent individuals. The oropharynx, cervix, and anorectum are most frequently involved, but the disease can manifest in the eyelids,1 conjunctiva,2 and iris.3 Rare cases of Leishmania infection within basal cell carcinoma1 and SCC3 have been reported, including a single Brazilian case of mucocutaneous leishmaniasis of the conjunctiva with an ensuing epidermoid carcinoma in the orbit.5 To our knowledge, we report the first case of visceral leishmaniasis within conjunctival SCC.

Visceral leishmaniasis commonly affects the liver and spleen. There is a strong association between HIV and visceral leishmaniasis, with an increasing incidence in nonendemic regions.6 Exploiting the host immune system, Leishmania upregulates HIV via nuclear factor κB, interferon γ, interleukin 12, and/or interleukin 18.7 There are reports of the oral manifestations of Leishmania including blepharoconjunctivitis,9 anterior uveitis,8 thrombocytopenic intraretinal hemorrhages,12 and optic neuropathy14 from an orbital apex lesion. Pentavalent antimonial compounds such as sodium stibogluconate and meglumine antimoniate have been the traditional pharmacologic intervention. However, polynene antifungals such as amphotericin B or the antiprototozoal medication miltefosine are the current standards of care. Plans for additional treatment of the SCC will be directed by the patient’s response to antimicrobial therapy.

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