to Latin America has become increasingly common, ML is increasingly seen among returning travelers. Patients with ML have destructive lesions that do not heal spontaneously and progress to destroy the nasal septa, the soft palate, and the hard palate, causing severe facial deformation and respiratory disturbances [2]. Pentavalent antimonials are the drugs of choice for the treatment of ML, although they have various adverse effects. To our knowledge, there have been no reports of patients with ML being treated with amphotericin B colloidal dispersion (ABCD), a lipid formulation of amphotericin B. The ideal therapeutic dose and efficacy of this drug is not established for ML, although there were 2 recent reports involving treatment of ML with liposomal amphotericin B [3, 4]. The tissue penetration of ABCD differs from that of liposomal amphotericin B, which could result in a different response in the treatment of ML [5].

We performed a pilot study to determine the efficacy of ABCD in the treatment of ML within the context of therapeutic challenges. Data on patient characteristics, contraindications for antimonial and deoxycholate amphotericin B use, ABCD dose, and outcome are presented in Table 1. All patients presented with ML with recurrent lesions and had a history of antimonial treatment (1–5 years earlier). The drug was administered by weight (3 mg/kg/day), on the basis of previous studies of other antifungal therapies [1]. Adverse effects included hypokalemia in 2 patients (potassium level, 2.9 mEq/L and 2.7 mEq/L, respectively), 1 of whom had concomitant hypomagnesemia (magnesium level, 1.3 mEq/L). In 1 of the 2 patients with hypokalemia, the glomerular filtration rate was reduced, although it returned to normal 3 days after discontinuation of the treatment, and treatment was subsequently reintroduced. The cure rate was 100%, and the mean time to healing was 102 days. No recurrence was observed during the follow-up period (range, 7–14 months; mean, 10.6 months). Re-treatment, which is typically indicated if inflammation persists for 30 days after the start of treatment, was not required for any of the patients.

Lipid formulations of amphotericin B have been developed in attempts to improve efficacy and tolerability—in particular, to decrease renal toxicity. Such formulations selectively damage parasite cells without significantly affecting mammalian cells [5]. These formulations concentrate within phagocytic cells, increasing the killing of amastigotes, which are most commonly found in macrophages [6].

In our study, a mean total dose of 40.6 mg/kg resulted in the healing of lesions in all of the patients treated. In a previous study involving 6 patients treated with liposomal amphotericin B, 1 patient had a recurrence within 6 months [4]. In the present study, however, no episodes of recurrence were observed during the follow-up period.

Adverse effects limit the use of antimonial therapy [7]. Therefore, the fact that lipid formulations of amphotericin B

### Table 1. Characteristics and outcomes of patients with mucosal leishmaniasis treated with amphotericin B colloidal dispersion.

<table>
<thead>
<tr>
<th>Sex/age, years</th>
<th>Lesion site</th>
<th>Previous treatment</th>
<th>Contraindication(s)</th>
<th>Total cumulative dose, mg</th>
<th>Dose, mg/kg</th>
<th>Outcome</th>
<th>Duration of hospital stay/follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>M/78</td>
<td>Palate</td>
<td>Y (5 years earlier)</td>
<td>CRF, AVR</td>
<td>2160</td>
<td>36</td>
<td>Cure</td>
<td>20 days/10 months</td>
</tr>
<tr>
<td>M/76</td>
<td>Palate/oropharynx</td>
<td>Y (1 years earlier)</td>
<td>CRF</td>
<td>2064</td>
<td>48</td>
<td>Cure</td>
<td>13 days/14 months</td>
</tr>
<tr>
<td>M/54</td>
<td>Nose</td>
<td>Y (1 years earlier)</td>
<td>ARF</td>
<td>2800</td>
<td>42</td>
<td>Cure</td>
<td>16 days/7 months</td>
</tr>
<tr>
<td>M/72</td>
<td>Larynx</td>
<td>Y (2 years earlier)</td>
<td>ARF</td>
<td>2000</td>
<td>35</td>
<td>Cure</td>
<td>15 days/13 months</td>
</tr>
<tr>
<td>F/55</td>
<td>Nose/palate</td>
<td>Y (1 years earlier)</td>
<td>ARF</td>
<td>2016</td>
<td>42</td>
<td>Cure</td>
<td>17 days/9 months</td>
</tr>
<tr>
<td>Mean</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>2168</td>
<td>40.6</td>
<td>...</td>
<td>16 days/6.6 months</td>
</tr>
</tbody>
</table>

**NOTE.** ARF, acute renal failure; AVR, altered ventricular repolarization; CRF, chronic renal failure.

*Contraindications to the use of antimonials or deoxycholate amphotericin B.
provoke fewer adverse effects is an additional advantage, although antimonials remain more cost-effective.

ML is of considerable epidemiological significance and is a concern for health professionals working in the area of travel medicine [8]. In this study, we have shown that the use of ABCD is a valid option for the treatment of ML, and we have proposed a standard dose. Further studies are needed to evaluate the efficacy of lower doses and to decrease the costs and adverse effects associated with this group of medications. Such studies should also employ longer follow-up periods to determine the frequency of late recurrence.

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