Cryptococcal Disease Presenting With Cellulitis in Kidney Transplant Recipients

To the Editor:

We would like to make some comments on the interesting article by Yokose et al. describing a case of cryptococcal meningitis presenting with lower leg cellulitis in a recipient of a kidney transplant. The authors state that their case “highlights a good example of an anchoring bias,” but, in our opinion, it could be better defined as an example of overlooked and delayed diagnosis of cryptococcosis for the following reasons: 1) the patient was an immunocompromised host (a solid organ transplant [SOT] recipient receiving immunosuppressive treatment), and the failure of empiric antibiotic treatment should have suggested a search for opportunistic pathogens, including fungi; 2) cryptococcosis is the third-most frequent invasive fungal infection in SOT recipients, and those with kidney transplants are involved in 50%-95.6% of the cryptococcosis cases described in this context (Table 1); 3) cellulitis of the lower limbs is the second-most frequent manifestation of cutaneous cryptococcosis and a well-known manifestation of cryptococcosis in SOT recipients; 4) mild headache or negative central nervous system imaging (computed tomography [CT] or magnetic resonance imaging [MRI]) cannot rule out a clinical picture of cryptococcal meningitis, per se, especially in the presence of other signs of infection. Opportunistic infections should be always be considered long after a SOT, and it should be remembered that cryptococcosis may present later in recipients of kidney transplants than in the recipients of other organs.

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Table 1 Clinical Aspects of Cryptococcosis Among Solid Organ Transplant (SOT) Recipients

<table>
<thead>
<tr>
<th>Author/Reference</th>
<th>Country</th>
<th>Cryptococcosis cases</th>
<th>Site of infection (No. of cases, %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No. of SOT recipients</td>
<td>No. of kidney transplant recipients (%)</td>
</tr>
<tr>
<td>Singh N et al J Infect Dis. 2007;195:756-764</td>
<td>United States, Canada, Spain, France, India</td>
<td>111</td>
<td>57 (51)</td>
</tr>
<tr>
<td>Sun H-Y et al Med Mycol. 2010;48:785-791</td>
<td>United States, Canada, France, Spain, India, Taiwan</td>
<td>26*</td>
<td>13 (50)</td>
</tr>
<tr>
<td>Brizendine KD et al PloS One. 2013;8:e60431</td>
<td>United States</td>
<td>84</td>
<td>46 (55)</td>
</tr>
<tr>
<td>Gassiep I et al Transpl Infect Dis. 2017;19:e12639</td>
<td>Australia</td>
<td>23</td>
<td>22 (95.6)</td>
</tr>
<tr>
<td>George IA et al Clin Infect Dis. 2018;66:608-611</td>
<td>United States</td>
<td>167</td>
<td>100 (60.1)</td>
</tr>
</tbody>
</table>

*The study included only SOT patients with cutaneous cryptococcosis. CNS = central nervous system; No. = number.

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7. George IA, Santos CAQ, Olsen MA, Powderly WG. Epidemiology of cryptococcosis and cryptococcal meningitis in a large retrospective cohort of patients after solid organ transplantation. Open Forum Infect Dis 2017;4:ofx004.