

## 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.<sup>1</sup> 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,<sup>2</sup> 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;<sup>3-5</sup> 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,<sup>6</sup> 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.<sup>7</sup>

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<https://doi.org/10.1016/j.amjmed.2019.08.012>

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

Author/Reference	Country	Cryptococcosis cases		Site of infection (No. of cases, %)		
		No. of SOT recipients	No. of kidney transplant recipients (%)	Lung	CNS	Skin/soft tissue
Singh N et al <i>J Infect Dis.</i> 2007;195:756-764	United States, Canada, Spain, France, India	111	57 (51)	60 (54)	58 (52.2)	20 (18)
Sun H-Y et al <i>Med Mycol.</i> 2010;48:785-791	United States, Canada, France, Spain, India, Taiwan	26*	13 (50)	6 (23.1)	16 (61.5)	All
Brizendine KD et al <i>PLoS One.</i> 2013;8:e60431	United States	84	46 (55)	23 (28)	50 (60)	10 (11.9)
Gassiep I et al <i>Transpl Infect Dis.</i> 2017;19:e12639	Australia	23	22 (95.6)	5 (21.7)	7 (30.4)	6 (26.1)
George IA et al <i>Clin Infect Dis.</i> 2018;66:608-611	United States	167	100 (60.1)	70 (41.9)	68 (40.7)	13 (8.1)

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

**Funding:** None.

**Conflicts of Interest:** None.

**Authorship:** All authors had access to the data and a role in writing this manuscript.

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