

## Dysfunctional chemokine receptor promotes candidiasis

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*Candida albicans* is one of the leading causes of hospital-acquired infections in immune compromised patients. The risk of both developing candidiasis and the clinical outcome of infection is variable among patients, and the host-dependent factors that contribute to patient susceptibility to *C. albicans* infection are poorly understood.

In this issue of the *Journal of Clinical Investigation*, Michail Lionakis and colleagues at the National Institute of Allergy and Infectious Diseases demonstrated that the chemokine receptor  $CX_3CR1$  is required for the interaction of *C. albicans* and macrophages in the kidney. Mice lacking this receptor were prone to *C. albicans*-induced kidney failure; however, these mice did not have increased fungal burden in other organs. Furthermore, the authors found that patients with a mutation in the gene encoding  $CX_3CR1$  were at higher risk of candidiasis.

This study identifies an important role for the interaction of *C. albicans* and <u>macrophages</u> in <u>disease progression</u> and outcome.

**More information:** CX3CR1-dependent renal macrophage survival promotes Candida control and host survival, *J Clin Invest*. <u>DOI:</u> <u>10.1172/JCI71307</u>

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