In vivo induction of neutrophil chemotaxis by secretory aspartyl proteinases of *Candida albicans*.

Gabrielli E, Sabbatini S, Roselletti E, Kasper L, Perito S, Hube B, Cassone A, Vecchiarelli A, Pericolini E (2016) *In vivo* induction of neutrophil chemotaxis by secretory aspartyl proteinases of *Candida albicans. Virulence* 7(7), 819-825.

Details



Abstract

Secretory aspartyl proteinases (Saps) of Candida albicans are key virulence traits which cause inflammasome-dependent, aseptic inflammation in a mouse model of vaginitis. In this paper, neutrophil migration in response to Sap2, Sap6 and chemo-attractive products released from Saptreated vaginal epithelium was measured in vitro, ex vivo and in vivo. Our results show that Sap2 and Sap6 induce neutrophil migration and production of potent chemoattractive chemokines such as IL-8 and MIP-2 by vaginal epithelial cells. Our data suggest that at least part of MIP-2 production depends upon IL-1β activity. The vaginal fluid of Candida-infected mice contained a heat-labile inhibitor of neutrophil candidacidal activity that was absent from the vaginal fluid of Saptreated mice. Overall, our data provide additional information on the capacity of C. albicans Saps to cause aseptic vaginal inflammation and highlight the potential role of some chemokines released from vaginal epithelial cells in this phenomenon.

Involved units

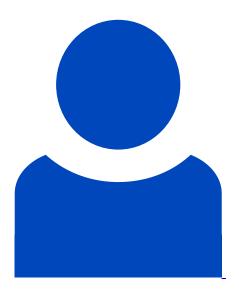
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Topics

Interactions with immune cells (MPM)

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