

Damiens S, Poissy J, François N, Salleron J, Jawhara S, Jouault T, Poulain D, Sendid B. (2013). Mannose-binding Lectin levels and variation during invasive candidiasis. *J Clin Immunol.* 32(6):1317-23.

The high morbi-mortality associated with invasive candidiasis (IC) is a persistent problem in hospitals. Mannose-binding lectin (MBL) plays a role in innate immunity through its interaction with mannosylated molecules of *Candida albicans*. A correlation between MBL deficiency and vulvovaginal candidiasis or peritonitis has been reported. We investigated circulating MBL levels and their evolution during the course of IC. Sixty-eight patients with proven IC, 82 hospitalized patients (HP) without evidence of infection, and 70 healthy subjects (HS) were studied in order to examine the relationship between serum MBL and IC. Serum MBL levels were measured by enzyme-linked immunosorbent assay (ELISA). MBL levels were significantly higher in IC patients than in HP and HS ($p < 0.0001$, $p < 0.0055$, respectively). A change in MBL concentrations was observed during the course of IC, with a dramatic decrease during the 2 days before positive blood culture sampling. This decrease was concomitant with the presence of high levels of circulating mannan (Mn). Like MBL levels, anti-mannan antibodies (AMn) increased after the mannanemia/blood culture period. These findings suggest a possible role of MBL during the early stage of IC. The mechanisms that regulate these observations in terms of effect and consequences on innate and adaptive immunity and the prognosis of IC require further investigation.