

CANDIDA TRANSLOCATION MODEL MOUSE

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Background: Deep mycoses is the most serious infection which happened to immunocompromised hosts, like leukemia or malignant lymphoma. *Candida albicans* (*C. albicans*) is the most frequent causative agent of the deep mycosis, although it exists in the oral, gastrointestinal, dermal and vaginal flora in humans. Then *C. albicans* is not a component of the indigenous microflora in the rodent gut. To mimic the deep mycosis which the yeast translocated from the intestinal tract and disseminated systemic organs, We made an appropriate mouse model and introduced you.

Method: DBA 2-J mice was given malnutrition or normal feedings for 20 days. We checked whether their stools could consist of *C. albicans* or not and *C. albicans* was colonized in the gastrointestinal tracts. We inoculated them intragastrically with *C. albicans*. The mice were administered intraperitoneally Methotrexate (MTX) on the 4th day and Cyclophosphamide (CPA) on the 4,5,6,7,8th day.

Result: *C. albicans* was isolated from stools of malnutrition mice for 40 days, but not from normal nutrition mice.

On the 9th day the dissemination of *C. albicans* to the livers histologically conformed. The dissemination to the spleen, kidney and lung was also frequently.

The blood cultures were positive after the 8th day.

The liver cultures were positive after the 6,7th day.

5. *C. albicans* invaded the Esophagus-Cardia junction (E-C junction) in all cases. Small intestine or colon were invaded in some cases.

Assessment: To make mice models of deep mycoses leukopenia and injury of the mucous membrane of the gastrointestinal tract is necessary. Originally mice do not have *C. albicans* as their normal flora, but we could settle *C. albicans* in the GI tract by malnutrition and translocate them by using antibiotics and anti-cancer drugs. We use model and endeavored the mechanism of the deep mycosis. We presented the use of the mouse in another poster.