

Table 2. Serum antigen tests* commercially available for the diagnosis of invasive candidiasis

	Cand-Tec	Pastorex Candida	Enolase (Directigen Disseminated Candidiasis Test)
Antigen	Heat-labile glycoprotein antigen	Mannan antigen	48-kD cytoplasmic protein
Manufacturer	Ramco Laboratories, USA	Sanofi Diagnostics Pasteur, France	Becton-Dickinson, USA
Method	Latex agglutination	Latex agglutination	Liposomal immunoassay
Sensitivity	6-71%	33-65% (single sample), 77% (sequential samples)	54% (single sample), 85% (sequential samples)
Specificity	Moderate	Highly specific	Highly specific

* Data from references [6], [15], and [16]

[5]. 가 . Itraconazole , 0.25 0.5 μ g/mL , 1 μ g/mL

MIC 0.125 μ g/mL

[18,19]. Amphotericin B MIC 0.25 1 μ g/mL

mannan, heat labile glycoprotein [5,6]. NCCLS M27-T 가

cytoplasmic protein 가 가

Pastorex Candida (Sanofi Diagnostics Pasteur, France), Directigen [18, 20].

Cand-Tec (Ramco Laboratories, USA) 2. (Cryptococcosis)

Disseminated Candidiasis test (Becton-Dickinson, USA) *C. neoformans* budding

(Table 2)[15-17].

Cand-Tec creatinine [17],

mannan enolase 가 enolase

immunoblotting [3,6]. , mannan Pastorex Candida

latex 가 가 *C. neoformans* india ink

가 가

[6,15,16]. *Candida* spp. 가 가 가 [4].

Candida spp. fluconazole MIC 4 μ g/mL *C. neoformans*가 가

C. krusei *C. glabrata* 8 μ g/mL 5 10 mL . 가

fluconazole [10,11]. fluconazole 90 95% . *C.*

fluconazole *C. albicans* *neoformans* , , , ,

Fluconazole MIC 10

MIC 64 μ g/mL , 16 32 μ g/mL 30% AIDS (35 70%).

8 μ g/mL 10

MIC 20%

[18,19]. *C.* 가

albicans , *C. albicans*가 *C. neoformans* [4].

Candida spp. [4,6]. Latex

Table 3. India ink vs. cryptococcal antigen test for the diagnosis of cryptococcosis

	India ink	Cryptococcal antigen
Use	Detection of <i>C. neoformans</i> in CSF	Detection of <i>C. neoformans</i> antigen in serum, CSF, body fluid
Advantage	When positive in CSF, it is diagnostic for meningitis	Highly sensitive and specific for diagnosis of meningeal and disseminated forms of cryptococcosis
Disadvantage	Positive in <50% of case of meningitis; not reliable	False positive results in disseminated infection caused by <i>Trichosporon beigelii</i>

(ELISA) , , . Zygomycetes 가 , , 90% [2-4]. 가 (Table 3). 4. (Aspergillosis) *Aspergillus* spp. (septate hyphae) conidial head vesicle phialide conidia chain fungus ball , [2]. A. *fumigatus*, *A. flavus* *A. niger*가 , *A. terreus*, *Aspergillus. nidulans* *A. ustus* [2,3, 23]. 3. Zygomycosis (Mucormycosis) Zygomycosis (aseptate hyphae) Zygomycetes . Zygomycetes Mucorales (order) Entmophthorals 가 Mucorales 가 , *Rhizopus*, *Mucor*, *Absidia* *Rhizomucor* (spore)가 *Pseudallescheria boydii* , DNA , (rhincerebral form), 가 , 가 , [22]. 가 . BAL, , 가 [2-4]. *Rhizopus orizae* (60%) *Rhizopus microsporus* var. *rhizopodiformis* (15%) [2,3]. BAL 가 (palate) *Aspergillus* .

spp. . *Aspergillus* spp. ,
Aspergillus . *Aspergillus* 가
[4,6]. latex
(Pastorex *Aspergillus*, Sanofi Diagnostics Pasteur,
France) 70% 86% ,
(Sanofi Diagnostics Pasteur, France) 90%
84% [25].

BAL 가
BAL latex
가 latex
(diffuse infection) BAL [26].
60% BAL , galactomannan 가
[4]. *Aspergillus* spp. [6,26]. 가
conidial head ,
philoides , vesicle , conidiophores h lle [6].
cells [2,3].
(immunodiffusion)
가
[4,5].
(double
Immunodiffusion) [5]. 가
(reference serum) 100% [5].
70%,
fungus ball 90% 가
가
),
((melanin
가
가
99% 14 36% 72 3 5 가
[24]. 가
[2,3].
galactomannan 가 latex
[6,25,26].
Galactomannan 가
가

- 가 mannann galactomannan 가
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