

Volume 6, No. 1 (Supplement)

June 2011

ISSN 1823-2140

The
National University
with an
INTERNATIONAL REACH

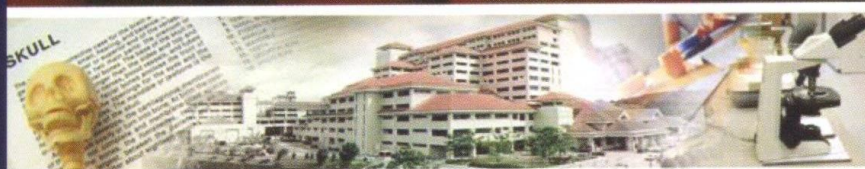


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MEDICINE & Health

The Official Journal of The Faculty of Medicine UKM

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DYNAMICS OF GXM ANTIGEN IN SPINAL FLUID OF AIDS PATIENTS SUFFERING FROM MENINGEAL CRYPTOCOCCOSIS

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Background:

Cryptococcus neoformans is a low virulent yeast that causes infection in patients with low cellular immunity. The most common clinical manifestation of cryptococcosis in AIDS is meningitis. *Glucuronoxylomannan* (GXM) is one of methods of diagnosis of cryptococcosis which could be done on the basis of GXM concentration in the clinical samples e.g. serum, spinal fluid. GXM is not merely a virulence factor but it also has an important role in serology based diagnosis.

Materials and Methods:

We examined spinal fluid by direct examination with Indian ink, fungus isolation by culture on *Sabourraud Dextrose Agar* (SDA) and *Bird Sheed Agar* (BSA), and GXM antigen detection (BioRad-Pastorex). We evaluated the results.

Results:

All direct examination via Indian ink test from spinal tap were positive, but the fungus could be isolated just from the first tap. Antigen detection for GXM was positive for neat from all tap, and positive for 100× dilution just from the first and the second tap, but for 300× dilution only positive for the first tap.

Conclusion:

GXM detection can be used for the diagnosis and follow-up of therapy in HIV infected patients with cryptococcal meningitis. The detection of polysaccharide antigen GXM of *Cr. neoformans* is both sensitive and specific for the diagnosis of cryptococcosis. The dynamics concentration of GXM in spinal fluid of these patients might be use for follow up of therapy.

Key words:

Cr. neoformans, HIV infection, antifungal therapy.