

Clinical performance of Dynamiker[®] Cryptococcal Antigen Lateral Flow Assay compared to IMMY[®]

CrAg LFA in diagnosis of Cryptococcosis

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Background

Cryptococcosis is one of the major invasive fungal diseases and early diagnosis plays an important role in treatment. Detection of cryptococcal antigen in blood and cerebrospinal fluid (CSF) is critical mycological evidence in diagnosis of Cryptococcosis. In this study we evaluate the clinical performance of newly developed Cryptococcal Antigen Lateral Flow Assay(LFA) by comparing with IMMY[®] CrAg LFA.

Materials and Methods

Total of 82 CSF samples and 94 serum samples from patients who were at risk of Cryptococcosis were retrospectively collected. Serum or CSF Cryptococcal Antigen levels were determined by using Dynamiker[®] Cryptococcal Antigen LFA and IMMY[®] CrAg LFA at the same time. An additional test was performed if initial test result was positive.

Table1 Comparison of CSF and Serum samples

CSF sample		IMMY LFA		
		Positive	Negative	Total
DNK LFA	Positive	25	1	26
	Negative	0	56	56
	Total	25	57	82
Serum sample		IMMY LFA		
		Positive	Negative	Total
DNK LFA	Positive	35	2	37
	Negative	0	57	57
	Total	35	59	94

Results

Twenty-six of 82 CSF samples were determined as positive by Dynamiker[®] LFA while 25 samples were positive in IMMY[®] CrAg LFA. There were 37 positive serum samples determined by Dynamiker[®] LFA compared with 35 positive samples from IMMY[®] CrAg LFA. All IMMY[®] CrAg LFA positive samples were also Dynamiker[®] LFA positive in this study. The Kappa value for CSF samples and serum samples were 0.972 and 0.955, respectively.

Conclusion

The clinical performance of Dynamiker[®] Cryptococcal Antigen LFA is highly consistent with that of IMMY[®] CrAg LFA

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