infected by non-ESBL-producing isolates gave negative results with the ESBL NDP test. Results of the ESBL NDP test were 100% correlated with those of the double disk-diffusion method with the main advantage that they were obtained in less than 30 min directly from the clinical sample versus an additive 24 h time of incubation for the double disk-diffusion method.

Conclusion: Using the ESBL NDP test, identification of an ESBL producer responsible for a bacteremia can be reduced from 24-48 hours to 30 min with 100% sensibility, 100% specificity, 100% negative predictive value and 100% positive predictive value. Since the successful treatment of septicemia depends on prompt administration of the appropriate antimicrobial agents, use of the ESBL NDP test directly from positive blood cultures may significantly improve the outcome of infected patients.

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A case of chronic meningitis caused by *Cryptococcus neoformans*, which was detected only with the use of mycobacterial blood culture bottle for cerebrospinal fluid

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Background: Cryptococcus is known to cause chronic meningitis. Diagnosis is usually made with the use of cryptococcus antigen test of cerebrospinal fluid (CSF). Despite its high sensitivity, false negative result can occur, particularly then the amount of the organism in CSF was small. We herein report a case of cryptococcal meningitis in a non-HIV patient, with negative india ink, negative CSF cryptococcal antigen test, negative routine CSF fungal culture, and positive only with the use of mycobacterial blood culture bottle.

Methods & Materials: The patient is 38-year-old man without significant past medical history, who presented with gait instability for 40 days. He also complained of intermittent headache since 20 days prior to the first visit, which worsened gradually. He started to feel weak on his left lower extremity, and had difficulty in standings up. On physical examination, he was alert but disoriented. His neck was supple, but had gait instability. Head magnetic resonance imaging study only showed widening of lateral ventricles. Cerebrospinal fluid examination revealed opening pressure was 24.5 cmH_2O, cell count 143/μL with 87% polymorphonuclear cells, protein 184 mg/dL, glucose 7 mg/dL, with negative Gram staining, acid fast bacilli staining, india ink staining, and cryptococcal antigen test.

Results: Cryptococcus neoformans var grubii was detected only from mycobacterial culture bottle 7 days later, despite negative routine fungal culture. He was treated with amphotericin B lipid complex and flucytosine, together with spinal drainage, followed by fluconazole maintenance therapy for 6 months. His neurological abnormalities improved without recurrence

Conclusion: Cryptococcal antigen test of CSF has high sensitivity for the diagnosis of meningitis, but false negative still can occur. Previous studies suggest that the use of mycobacterial blood culture bottle may increase the sensitivity of fungemia in general. There is no literature reporting the use of mycobacterial blood culture bottle for the diagnosis of cryptococcal meningitis. The use of it on CSF, on top of conventional work up, may heighten the diagnostic yield of this infection.

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Utilization of malaria diagnostic tests and receipt of anti-malarial drugs by febrile patients attending outpatient departments of health center IVs in Mukono district, Uganda

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Background: Failure to demonstrate the presence of malaria parasites prior to treatment with anti-malarial drugs remains a challenge in Uganda, often resulting into over-prescription of anti-malarial drugs to febrile patients suspected of malaria. The aim of this study was to describe the role of utilization of malaria diagnostic tests and associated factors in the receipt of anti-malarial drugs among febrile patients suspected of malaria.

Methods & Materials: In a cross-sectional study design, client-exit interviews with febrile patients and key-informant interviews with purposively selected health workers were conducted at health center IVs in Mukono district. Data entry and analysis were done using Epi-Data 3.2 and STATA 10 respectively. Data were described using frequency distributions and proportions. Chi square was used in two by two tables, odds ratios as the measure of association and an alpha level of 0.05 was used in all significance tests.

Results: Out of 408 respondents, 359 (88%) utilized malaria diagnostic tests and 241(59%) received antimalarial drugs. Majority were female 252 (61.8%) and a third of the sample was aged five years and below. There were no statistically significant differences between utilizers and non-utilizers in most characteristics except age, history of indoor residual spraying and satisfaction with services. Utilizers were 75% less likely to receive anti-malarial drugs than non-utilizers after controlling for age, sex and residence (OR: 0.25, 95%CI: 0.09, 0.66).

Power was the main limitation to microscopic diagnosis of malaria and laboratory personnel had limited knowledge on malaria treatment guidelines.

Conclusion: Utilizers were 75% less likely to receive anti-malarial drugs as opposed to non-utilizers. This implies that increasing utilization of malaria diagnostic tests can reduce the problem of overprescription of anti-malarial drugs by 75% among those tested for malaria, since antimalarial drugs will be received by only those with a parasitologically-confirmed diagnosis of malaria.

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