

ABSTRAK

UJI DIAGNOSTIK TES *Human Immunodeficiency Virus* GENERASI KEEMPAT PADA TERSANGKA INFEKSI HIV

Latar Belakang: Diagnosis dini infeksi *human immunodeficiency virus* (HIV) dapat mengurangi risiko transmisi. Infeksi akut dapat ditegakkan berdasarkan pemeriksaan antigen atau asam ribonukleat (RNA/proviral DNA) HIV. *Enzyme immunoassay* (EIA) generasi keempat adalah *immunoassay* yang dapat mendeteksi antigen p24 dan antibodi HIV. Tujuan penelitian adalah mengetahui nilai diagnostik tes HIV generasi keempat pada tersangka HIV.

Desain dan Metode: Penelitian ini merupakan uji diagnostik dengan rancangan potong lintang. Sampel penelitian adalah semua pasien tersangka HIV yang datang ke poliklinik *volunters counselling and testing* (VCT) RSUP Dr. M. Djamil Padang mulai Maret 2015 sampai Maret 2016. Penelitian ini dilakukan untuk menilai akurasi diagnostik (sensitivitas, spesifisitas, nilai prediksi positif, nilai prediksi negatif) tes HIV generasi keempat menggunakan *enzyme linked fluorescent assay* (ELFA) terhadap deteksi RNA HIV menggunakan *reverse transcriptase polymerase chain reaction* (RT-PCR) serta dianalisis menggunakan tabel 2x2.

Hasil: Subjek penelitian sebanyak 70 orang tersangka HIV terdiri dari 46 laki-laki (65,7%) dan 24 perempuan (34,3%) dengan rerata umur 27,7 tahun. Transmisi HIV terbanyak adalah perilaku heteroseksual (45,7%). Nilai diagnostik tes HIV generasi keempat terhadap RNA HIV didapatkan sensitivitas 95%, spesifisitas 96%, nilai prediksi positif 97%, dan nilai prediksi negatif 92%.

Simpulan: Penelitian ini mendapatkan nilai diagnostik tes HIV generasi keempat yang tinggi terhadap RNA HIV.

Kata Kunci: RNA HIV, tes HIV generasi keempat, uji diagnostik

ABSTRACT

DIAGNOSTIC TEST OF *HUMAN IMMUNODEFICIENCY VIRUS* FOURTH GENERATION TEST IN SUSPECT HIV INFECTION

Background: Early diagnosis for human immunodeficiency virus infection can reduce the risk of transmission. Acute infection diagnosis based on antigen assay or ribonucleic acid test (RNA/proviral DNA). Enzyme immunoassay (EIA) fourth generation can detect HIV p24 antigen and antibodies simultaneously. The research objective was to determine the diagnostic value of the fourth-generation HIV testing in HIV suspects.

Design and Methods: This was a diagnostic test with cross-sectional design, performed on 70 patients with suspected HIV who come to the clinic volunteers counselling and testing (VCT) Dr. M. Djamil Hospital Padang from Maret 2015 to Maret 2016. The study was to measured diagnostic value (sensitivity, specificity, positive predictive value, negative predictive value) of fourth generation HIV tests with enzyme linked fluorescent assay (ELFA) against reverse transcriptase polymerase chain reaction (RT-PCR) RNA HIV and analyzed using crosstab 2x2.

Results: The were 70 subjects, consist of 46 men (65.7%) and 24 women (34.3%) with a diagnosis of HIV suspects. Mean of age is 27,7 year. Heterosexual is the major transmission of HIV. The sensitivity and specificity of fourth-generation HIV test against HIV RNA were 95% and 96% respectively, and the positive predictive value and negative predictive value were 97 and 92%, respectively.

Conclusion: The diagnostic value of fourth generation HIV test against HIV RNA were high.

Keywords: Diagnostic test, fourth-generation HIV test, HIV RNA

