BACKGROUND

AHI is defined by the presence of p24 Ag and/or HIV-RNA in the absence of HIV. Standard 3rd generation tests do not detect AHI. High HIV incidence (2.8%) and prevalence (7.7%) estimates in Portuguese men who have sex with men (MSM) and regular HIV testing (5-7 months between visits) peer counselor training for AIDS syndrome recognition, rapid linkage to care (< 72 hours) and access to anonymous partner notification at Checkpoint LX (community-based sexual health centre for MSM) increase the possibility of finding AHI cases. This study aims to compare two screening algorithms for AHI detection at Checkpoint LX.

METHODS

Between November 2014 to November 2017 (enrolment 3=9.5 months), adult MSM were tested with a combined rapid Ag/Ab test (algorithm 1, AlereTM HIV Combo®) and all adult MSM with AHI symptoms OR reactive Ag/Ab test OR whose sexual partner was diagnosed with HIV at Checkpoint LX in the prior 6 weeks were tested with rapid molecular HIV-RNA test (algorithm 2, AlereTM HIV-1/2 Detect®). All cases were assessed for CD4 cells count (AlereTM Pima®) and linked to care < 48 hours.

RESULTS

Algorithm 1: 86 reactive for Ab (1 for Ag/Ab confirmed positive); 46 for AbA confirmed negative; 5 for AbA confirmed positive and 1 for AHI confirmed negative were not considered due to non-AHI status by manufacturer's criterion. Algorithm 2: 48% in 115 tests - 77 non-reactive rapid Ag/Ab tests (1 confirmed positive), 1 for Ag/Ab confirmed positive, 4 for AHI confirmed negative. 0 for AHI confirmed negative, 9 refused to undergo confirmation).

12% of people confirmed positive were linked to care earlier due to CD4 count < 200 cells/mm³, 6.33% of people were confirmed negative.

CONCLUSIONS

4th generation tests did not add value in AHI detection. Targeted molecular HIV-RNA allowed AHI detection and spared clients from unnecessary medical appointments and anxiety when reactive tests were confirmed negative immediately. Onsite confirmatory tests reduced the gap time between a reactive test and diagnosis from 6 weeks to 1 hour. Onsite CD4 count enabled priority referrals when immunosuppression was found. HIV testing centers screening algorithms can benefit from onsite HIV-RNA and CD4 count POC technologies.

REFERENCES AND LEGENDS

11. EACS Guidelines version 1.0, October 2017.

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* Same day non-reactive HIV rapid test