#4 The Frequency and Yield of Cryptococcal Antigen Screening among Newly Diagnosed and Anti-Retroviral Therapy Experienced HIV Patients in Rural Uganda

Joseph Baluku, Uganda
The frequency and yield of cryptococcal antigen screening among anti-retroviral therapy (ART) naïve and ART-experienced HIV-infected patients in rural Uganda

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*Has no conflict of interests to declare
Background

- Cryptococcal meningitis accounts for 15% of HIV related deaths\(^1\)

- Programmatic CrAg screening and fluconazole can avert 43% of these deaths\(^2,3\)

- WHO\(^4\) recommends CrAg screening for ART-naive PLHIV with CD4<100/200 cells/mm\(^3\)

- Local guidelines recommend screening among ART-experienced PLHIV with VL non-suppression (VL > 1,000 copies/ml)

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Methods

- **Objective:** compare frequency and yield of CrAg screening among ART-naïve PLHIV and ART-experienced PLHIV with VL-NS.

- **Eligible:** ART-naïve (CD4 <100) and ART-experienced (VL > 1,000 copies after 6 months of ART)

- **Sites:** 104 public health facilities in rural central Uganda

- **Data sources:** Routine programmatic reports (July 2018 – July 2019)

- **Analysis:** Descriptive, Pearson’s/Fisher’s tests
Results: Eligible for screening

Total

15,417

Had CD4 test

5,719 (37.1%)

16.4% (937/5,719)

ELIGIBLE

ART naive

10.0% (7210/71860)

ART- experienced

71,860

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Results: Frequency of screening

- **Eligible**: 8,147
- **Screened**: 21.1% (1,721/8,147)
- **ART naive**:
  - 95.1% (891/937)
  - \( p < 0.001 \)
- **ART experienced**:
  - 11.5% (830/7,210)

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Results: CrAg positive

Screened  1,721

Positive  12.2%  (210/1721)

ART naive

13.8%  (123/891)  p = 0.035

ART- experienced

10.5%  (87/830)

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Discussion and Conclusion

• CrAg positivity was high among ART- experienced with VL NS (cf. 3.0%\(^1\))

• There was low frequency of screening for CrAg among ART - experienced with VL NS:
  • Changes in guidelines
  • Delays from receiving VL results to tracing patients for CrAg screening
  • Stock out of supplies

• Many ART-naïve were also lost along the cascade (only 37% had CD4 test)

• Need for studies to evaluate cost effectiveness and impact of VL-directed CrAg screening on outcomes of ART – experienced PLHIV

\(^1\)Clinical Infectious Diseases, ciz1069, https://doi.org/10.1093/cid/ciz1069
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