Audit of the Impact of an HIV Testing Protocol for Acute Neurology Admissions to a Tertiary Centre

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Background

- Approximately 1 in 4 HIV-positive patients remain undiagnosed in the UK; late diagnosis is associated with increased mortality [1,2].
- HIV enters the nervous system in the early stages of infection. 10% of sero-converting cases develop acute neurological symptoms [3].
- A pure neurological presentation of HIV is an opportunity to diagnose HIV at an early stage.
- In Sheffield (HIV prevalence 1.4 per 1000), the Departments of Genito-urinary Medicine and of Clinical Neurology jointly formulated a local "HIV testing in Neurology" protocol (figure 1) using UK National Guidelines for HIV testing [4].

Hypothesis

The development and dissemination of the "HIV testing in Neurology" protocol to all relevant clinical staff would increase HIV testing in appropriate patients admitted in an acute setting to the local tertiary neurology centre.

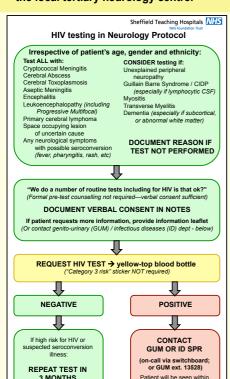


Figure 1: The Sheffield "HIV testing in Neurology" Protocol

Methods

We collected data from case-notes for acute (non-stroke) neurology admissions over two three-week periods before ("pre-protocol")

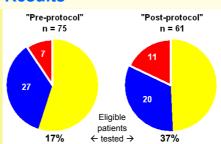
before ("pre-protocor"

after ("post-protocol")

the dissemination of the protocol.

- For each patient, we recorded:
- (1) patient eligibility for HIV testing
- (2) whether the HIV test was undertaken
- (3) result of the HIV test
- (4) for "post-protocol" cases:
 - (a) documentation of verbal consent
 - (b) eventual diagnosis.

Results



- HIV test indicated and performe
 HIV test indicated, not performe
 - HIV test indicated, not performed
 HIV test not indicated.

Figure 2: Summary of results of the audit

<u>"Pre-protocol" period:</u>

75 patients admitted, 41 HIV test indicated, of which **7 HIV tests performed (17%)**

"Post-protocol" period:

61 patients admitted,30 HIV test indicated, of which 11 HIV tests performed (37%)

- 5/18 patients who were tested for HIV had consent documented clearly in the notes.
- All of the HIV tests performed were negative.
- The eventual neurological diagnoses of "postprotocol" patients are shown in Figure 3 below.

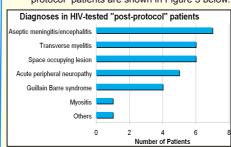


Figure 3: Frequency of Protocol Diseases (cf. Figure 1)

Discussion

- Implementation of the protocol increased uptake of HIV testing from 17% to 37%.
- Consent for HIV testing was poorly documented.
- Approximately 50% of acute (non-stroke) neurology admissions met the protocol criteria for HIV testing, which reflects the nature of acute neurological illnesses in such patients.
- Proforma" has now been amended to alert admitting doctors to consider HIV testing for acute admissions as per the protocol, and to document consent accordingly (Figure 4).

Conclusion

The "HIV Testing in Neurology" protocol was effective in increasing the uptake of opportunistic HIV testing in eligible patients admitted acutely to the local tertiary neurology centre.

Future work: We will re-audit HIV testing after implementation of the revised clerking

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Neurology Clerking Proforma formation given to patient/family/carer Yes / No



Figure 4: Amended "Neurology Clerking Proforma".

References

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 Report". London: Health Protection Services, Colindale, 2012
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THE AUTHORS DECLARE NO CONFLICT OF INTEREST