Diagnosing HIV infection in patients presenting with Glandular-fever-like illness in Primary care

- are we missing primary HIV Infection?

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Primary HIV infection (PHI)

> a major driver of HIV epidemics?

Self-resolving syndrome
2-4 wks after infection in ~80% of individuals

Non-specific symptoms:
fever, myalgia, headache, rash

Symptomatic period: 2-3 wks
often only clinical manifestation of HIV before AIDS

UK National Guidelines for HIV Testing 2008:

– **HIV test should be considered in the investigation of patients with a mononucleosis syndrome**

However:

• Missed opportunities for HIV testing outside traditional genitourinary medicine (GUM) and antenatal settings
• Rates of GP testing, in particular, remain low
Diagnosed HIV prevalence per 1,000 population aged 15-59 years, by local authority of residence: United Kingdom, 2010

> 2 per 1000

London

Southwark

Lambeth
Study question

To examine the HIV prevalence in patients presenting in primary care with GF-like illness (GFLI) to inform local health protection policy.
Methods

Unlinked anonymous seroprevalence study

Research Ethics approval obtained

Data source
- Primary care. GF-screen serum samples to GSTS laboratory serving 2 Central London boroughs, April 2009 and June 2010.

Analysis
- HIV Ab/Ag testing of anonymised samples without concomitant HIV request
- Confirmation of reactive with an HIV antibody only test. Samples with negative HIV antibody further tested for p24 Ag
- Routine Recent HIV Infection Testing Algorithm (RITA-HPA)- antibody avidity testing to identify individuals with evidence of PHI
Results

1045 patients with unknown HIV status presenting in Primary care with Glandular-fever-like-illness

118 Primary care requested HIV tests (11.29%)

45 (4.30%) had a subsequent HIV test within 1 year

3 new HIV diagnoses (2.54%)

2 new HIV diagnoses (4.44%)*

694 samples (78.69%) available for anonymous testing

6 new HIV diagnoses (0.87%)

3 recent acquisitions

HIV status remains unknown in 882 patients

Overall HIV prevalence 1.28% (11/857)

75% of PHI cases missed at initial GP consultation

*Both diagnosed through Antenatal screening (6 and 8 months after initial primary care consultation)
Commissioning perspective

• Lifetime treatment cost £280,000 to £360,000/patient

• 694 additional HIV tests over 15 months
  ➢ 6 HIV
  ➢ 3 PHI

<table>
<thead>
<tr>
<th>Serology test cost</th>
<th>£8 - 10</th>
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<tbody>
<tr>
<td>Est total additional cost</td>
<td>£5,552 - 6,940</td>
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<tr>
<td>Est cost per HIV diagnosis</td>
<td>£ 925 - 1,160</td>
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<tr>
<td>Est cost per PHI diagnosis</td>
<td>£1,850 - 2,310</td>
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➢ Reduction of onwards transmission, effective contact tracing
Limitations

• No demographic/ clinical information

• No HIV test offer/uptake data

• Generalibility <> Local relevance
Conclusion

• Low levels of HIV testing in GFLI patients presenting in primary care
• Undiagnosed HIV prevalence in GFLI group 3 times higher than in local population (1.3% vs est 0.4%)
• High levels of PHI (0.05%)

➢ Addition of HIV test to standard laboratory GFLI investigation panel is a practical and cost-effective HIV testing/prevention strategy