Audit of sexually transmitted infection (STI) screening in HIV positive pregnant women

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Background

- Large City based HIV service providing joint care to pregnant women with specialist Obstetric team
- Review of the screening and management of sexually transmitted infections (STI) in this group
- Comparison with British HIV association (BHIVA) national standards which at the time of audit were published in 2012

British HIV Association Guidelines for the Management of HIV Infection in Pregnant Women (2012):

- Offer Sexual Health Screening to:
  – Pregnant women newly diagnosed with HIV
  – HIV positive women already engaged in HIV care who become pregnant
- Timing of screening:
  – as early as possible in pregnancy
  – repeat at around 28 weeks
- Auditable outcomes:
  – Proportion of pregnant women newly diagnosed with HIV having a sexual health screen
  – No specific recommendation for women already known to be HIV positive and attending clinic

Method

- Registered with Trust Clinical Audit Registration and Management System
- 50 most recent completed pregnancies included
  – December 2015 to March 2018
  – Termination of Pregnancy/ Early miscarriage excluded
- Data from Electronic Patient Record entered onto Excel Spreadsheet

Data collected:

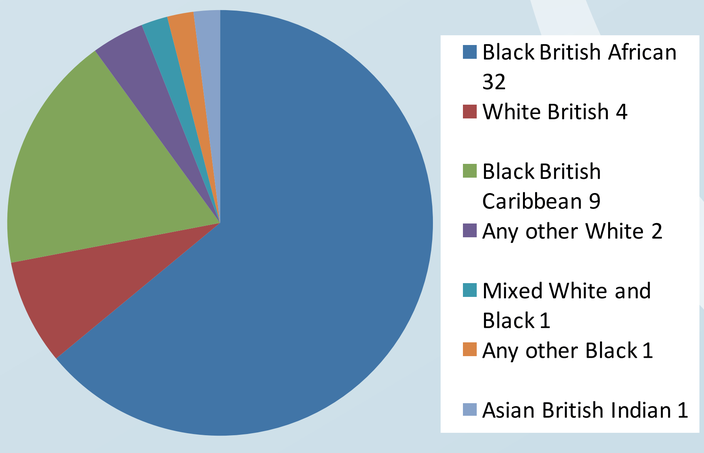
- Demographics
- HIV history – new or prior to pregnancy
- Whether STI screen undertaken; *Chlamydia trachomatis* (CT), *Neisseria gonorrhoea* (NG), *Trichomonas vaginalis* (TV), *Syphilis EIA* (enzyme immunoassay)*
- Timing of STI screens in pregnancy (early and 28 weeks)
- Treatment given, partner notification performed and test of cure undertaken where appropriate
- Pregnancy outcome

*data on Hepatitis B and C screening purposefully omitted

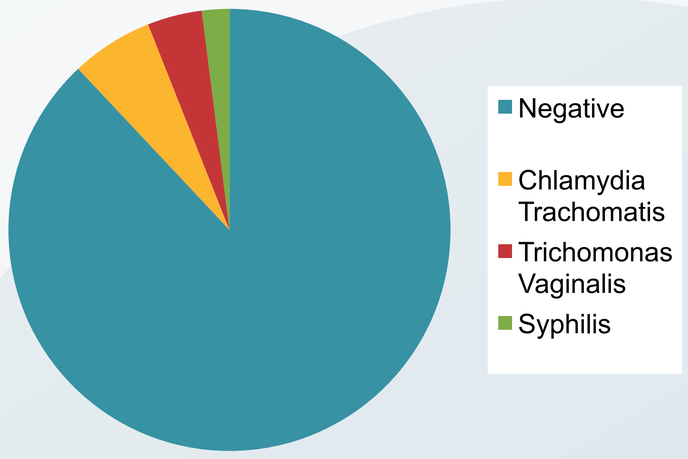
Results

- 50 pregnancies
- Age range: 19 years to 43 years (average age 33.6 years)
- Pregnancy outcome: 49 live births (2 delivered before 3rd trimester, 3 delivered in 3rd trimester but pre-term), 1 late miscarriage
- 48 pregnancies to women already attending HIV clinic
- 2 newly diagnosed women referred by Maternity Service

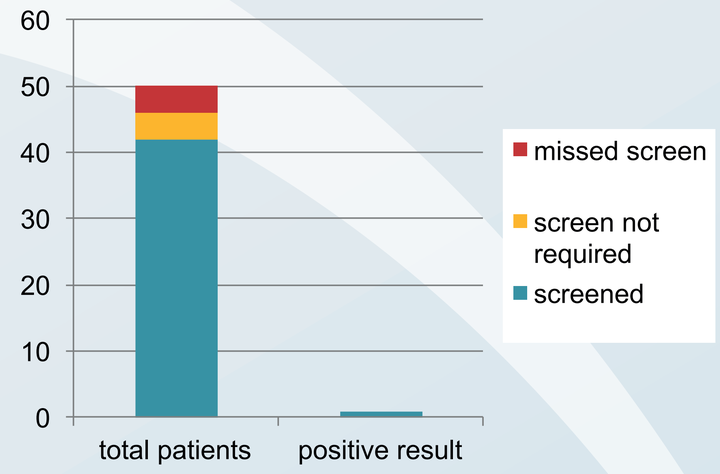
Ethnicity



Results 1st screen



Results 2nd screen



1st Screen

- 100% had 1st screen
  – Ranged from 4 – 26 weeks gestation
  – 14 screens after 15 weeks gestation (28%)
- Results of 1st screen
  – 6% (3 patients) positive for Chlamydia trachomatis (CT)
  – 4% (2 patients) positive for Trichomonas vaginalis (TV)
  * NB 3 TV screens not done at the 1st opportunity and were taken at a subsequent appointment
  – 1 Syphilis EIA positive/RPR negative (previous positive serology & treatment but unverifiable so retreated)
  – 2 newly diagnosed women had negative 1st screen
- Management of positive STI
  – All infections treated as per British Association for Sexual Health and HIV guidelines
  – All women with CT and TV had subsequent 'test of cure'
  – The woman with positive syphilis serology had follow up bloods as per BASHH guidelines, TPPA reverted to negative following treatment
  – All women with positive STI underwent partner notification with Health Advisor

2nd Screen

- 42 screens (84%)
  – Undertaken between 26 – 36 weeks gestation
  – Reasons why second 2nd screen not undertaken;
    - 2nd screens not required in 4 women
      - 1 late miscarriage in 2nd trimester (negative 1st screen)
      - 2 delivered before 3rd trimester (both had negative 1st screen)
      - 1 transferred HIV care to another centre
    - 2nd screen declined by 1 woman (negative 1st screen)
    - 3 women did not attend any further appointments during their pregnancy
      - All 3 gave birth pre-term
      - 2 had negative first screen
      - 1 had tested positive for syphilis on 1st screening and received treatment
      - All 3 were followed up with the obstetric team
  – Both newly diagnosed patients had a 2nd screen
- Management of positive STI on 2nd screen
  – 1 patient positive for TV:
    - Patient had also tested positive on 1st screen and had been unable to tolerate treatment, obstetrician notified and to follow up
    - No adverse pregnancy outcome

Summary

- 100% uptake of 1st screen
- 28% 1st screens are at >15 weeks' gestation
- Appropriate management of all positive results
- TV screening missed in 3 patients at 1st screen
- 84% uptake 2nd screen
- STI was only found in women already known to be HIV positive and attending clinic
- The audit process established that 6 women (12%) stopped attending HIV clinic once they had given birth, raising issues regarding child testing follow up

Recommendations

- Increase the number of pregnant women seen in HIV clinic in 1st trimester of pregnancy
  – we have had a number of pregnant women who needed to switch medication
- Undertake STI screen at earliest opportunity
- Continue to screen all women already known to be HIV positive
- Review the necessity for screening for TV in asymptomatic patients
  – Updated 2018 BHIVA guidelines do not make reference to TV
- Regarding women lost to HIV follow-up - to send copy of patient's default letter to neonatologist to ensure appropriate follow up with child testing service
- The new 2018 BHIVA guidelines on the management of pregnant women & post partum recommend screening for STI (including syphilis serology) and 'evidence for BV (bacterial vaginosis)'. We will be reviewing current practice based on the updated guidelines as we do not specifically 'screen for evidence of BV' as part of our STI screen

References

1. British HIV Association guidelines for the management of HIV infection in pregnant women 2012 (2014 interim review) https://www.bhiva.org/file/FCUcXrfVgWsYl/BHIVA-Pregnancy-guidelines-update-2014.pdf
2. British HIV Association guidelines for the management of HIV in pregnancy and postpartum 2018 https://www.bhiva.org/file/5bfd30be95deb/BHIVA-guidelines-for-the-management-of-HIV-in-pregnancy.pdf

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