

UK NATIONAL SCREENING COMMITTEE

Screening for Chlamydia Infection in Pregnancy

10 March 2011

Aim

1. This note provides background to the agenda item addressing the review of the evidence for screening for chlamydia infection in pregnancy. It summarises the small number of responses to the consultation exercise and proposes a policy statement for consideration by the UK National Screening Committee (UK NSC).

Chlamydia screening in pregnancy

2. Screening for chlamydia in pregnancy might have two aims:

- to reduce neonatal morbidities such as conjunctivitis, respiratory tract infections (including pneumonia), middle ear infections. The optimum timing for screening would be in late pregnancy.
- to reduce adverse outcomes of pregnancy such as low birth weight, prematurity, stillbirth, intrauterine growth retardation. The optimum timing for screening would be in early pregnancy.

Context of the review

UK National Screening Committee

3. The UK NSC's policy is that chlamydia screening should not be offered to pregnant women.

4. This view on chlamydia screening was shaped by the study reported by Preece et al in the late 1980's.^{1,2} This was an analysis of the UK's largest prospective study of chlamydia screening and provided a firm steer away from screening during pregnancy.

National Chlamydia Screening Programme (NCSP)

5. In contrast to the aims of screening in pregnancy, the primary objective of the NCSP is to reduce the incidence of sexually transmitted chlamydia infection and the related sexual and reproductive health morbidities (infertility and ectopic pregnancy). The Programme's opportunistic strategy within the under 25 age group has no inherent link to screening in pregnancy.

¹ Chlamydia trachomatis infection in late pregnancy: a prospective study; Preece, PM, Ades, A, Thompson, RG, Brookes, JH: Paediatric and Perinatal Epidemiology, 1989, 268 - 277

² Chlamydia trachomatis infection in infants: a prospective study; Preece, PM, Ades, A, Thompson, RG: Archives of Disease in Childhood, 1989, 64, 525 - 529

6. As the range of venues at which screening might be offered expanded antenatal services were included. A dialogue with the Fetal, Maternal and Child Health Coordinating Group (FMCH) began on this issue in late 2005.

National Institute for Health and Clinical Excellence (NICE) guidance

7. The statement relating to chlamydia screening in NICE's 2008 Routine Antenatal Care Guideline is complex and states:

'Chlamydia is a significant healthcare issue, especially among the young, but the current level of evidence provides an insufficient basis for a recommendation. Of particular importance is the possibility that treatment might reduce the incidence of preterm birth and neonatal complications, and studies should be directed to these areas.'

8. The recommendation is that:

- Chlamydia screening should not be offered as part of routine antenatal care.
- At the booking appointment, healthcare professionals should inform pregnant women younger than 25 years about the high prevalence of chlamydia infection in their age group, and give details of their local National Chlamydia Screening Programme.

National Audit Office and Chief Medical Officer (CMO) reviews of the NCSP

9. Two reviews of the NCSP have been completed and reported in 2009. The aim of the first review, carried out for the National Audit Office identified good practice and barriers to success and made recommendations to assist the NCSP and Primary Care Trusts achieve the Vital Signs Indicator screening target. The second review, requested by the Minister for Public Health, had similar objectives and explored strategic issues relating to implementation. The main recommendations of the second review addressed issues relating to NCSP strategy, delivery and governance. A key element of this was that the NCSP should focus its efforts on 'core venues' to improve testing uptake. These included community and sexual health services, termination of pregnancy clinics, GP surgeries and pharmacies but not antenatal clinics.

The evidence review process

10. The review process began in late 2009 and was undertaken by Dr Claire Thorne. Dr Thorne will present the results at the 10 March 2011 meeting of the UK NSC.

11. Two earlier drafts of the review were shared and discussed with the Department of Health (DH) Sexual Health Branch. Comments were submitted following consultation with stakeholders. The review document incorporated a number of detailed points as it developed into its current form. However a number of general points were made, including:

- that there is insufficient evidence to recommend universal screening aiming to reduce adverse outcomes of pregnancy and / or neonatal morbidities was accepted as consistent with the evidence,
- the review did not consider the wider public health benefits of screening for chlamydia, such as reduction of the infection's onward transmission, which are relevant during pregnancy,
- as prevalence of chlamydia is higher in the under 25s screening should be offered to this group during pregnancy as a way of addressing these public health issues.

12. However it was felt that the underlying justification for screening in the antenatal period should rest on the impact of chlamydia infection on the outcomes of the pregnancy and these could not be demonstrated in the whole population or in the under 25 age group.

13. The review was posted on the UK NSC's website in November 2010 and was open for comments until February 2011. The review was also circulated to key stakeholders the DH Sexual Health Branch, British Association of Sexual Health and HIV (BASHH), Health Protection Agency (HPA), Royal College of Obstetricians and Gynaecologists (RCOG), National Chlamydia Screening Programme (NCSP).

14. Comments were received from the RCOG, Scottish Lead Clinicians for Sexual Health, and the NCSP Advisory Group. In addition to this, comments were received from six other sources. These included three NCSP staff working at PCT level, one consultant midwife, a GUM physician and a consultant in public health.

15. The comments are available to members on request and in confidence. The following table summarises the comments.

Comments

	Comments
RCOG	RCOG submitted a note agreeing with the review's content and endorsing its conclusions.
Consultant midwife	A brief note was submitted endorsing the review's conclusions and suggesting that some consideration should be given to the costs of future infertility treatment.
Public health consultant	A brief note was submitted which accepted the review's conclusion that the benefit of screening could not be demonstrated. However the note suggested that the evidence does not support the withdrawal of screening where it currently takes place. More work to establish the full range of costs was suggested.
NCSAG	The Advisory Group made four main points: <ul style="list-style-type: none"> • the public health benefits of Chlamydia screening were relevant to under 25s in the antenatal period, • that the referral pathways for other conditions, from maternity services to GUM, provide a model for the management of women with screen positive Chlamydia test results,

	<ul style="list-style-type: none"> the review’s discussion of outcomes was hampered by a failure to consider newer, more sensitive, testing methodologies, that good quality research was lacking and joint work between the UK NSC and NCSP should be undertaken to develop proposals to address the gap. <p>NCSAG would wish to pursue screening in the under 25 age group during pregnancy.</p>
NCSP staff	<p>A number of comments were submitted from three NCSP staff at PCT level:</p> <ul style="list-style-type: none"> recent research had been published which illuminated the link between Chlamydia infection and ectopic pregnancy, screening for Chlamydia is a valued and well integrated component of Young Parents Midwifery Services, high prevalence in the under 25s was justified screening compared, for example, to HIV or syphilis, screening was perceived to reduce the risk of adverse outcomes and reduces anxiety for this reason, screening provides the opportunity to transfer information on prevention and behaviour change which reduces the risk of reinfection, there are equalities issues associated with not offering screening, lack of evidence needs to be addressed, pregnant women are a ‘receptive community’ for screening, re-testing in late pregnancy would address concerns about reinfection
GUM physician	<p>Comments were submitted which</p> <ul style="list-style-type: none"> highlighted some detailed issues about the way a small number of individual studies had been summarised, expressed some concern about the adverse effects of antibiotics in pregnancy, suggested that re-testing in later pregnancy may be required to address adverse outcomes arising from re-infection.
Scottish Lead Clinicians for Sexual Health	<p>The Scottish Lead Clinicians for Sexual Health submitted a note agreeing with the review’s conclusions and suggesting that final guidance from the UK NSC should state that:</p> <ul style="list-style-type: none"> Chlamydia infection causes less harm than previously thought there is no evidence that routine screening improves pregnancy outcomes mothers (and their partners) of infants with symptomatic chlamydia infection should followed up appropriately further guidance on treatment of Chlamydia in pregnancy should be delegated to RCOG and BASHH <p>The submission welcomed the recommendation that guidance on what to say to pregnant women who request Chlamydia testing should be developed and offered to assist in this work.</p>

Review outcome

16. The review suggests that no new evidence has been generated to revise the assessment of Preece et al. The consultation also tended to confirm the current UK

NSC policy that antenatal screening should not be offered with a view to reducing adverse pregnancy or neonatal outcomes.

17. The review also highlighted the practical and organisational complexities presented by the management of chlamydia infection in pregnancy. These include the timing of the test, the choice of antibiotics and the need for a test of cure. The consultation drew attention to the additional requirement to test for re-infection in later pregnancy. The opportunistic approach adopted by the NCSP may not be an appropriate organisational form to address these demands.

Proposed policy position statement

18. Screening for chlamydia during pregnancy is not recommended.

19. There is insufficient evidence that screening and treating women with positive results reduces the adverse pregnancy outcomes associated with chlamydia infection. There is also insufficient evidence that screening and treatment during pregnancy is more effective than the clinical management of infants with symptomatic infections. More generally, there are concerns about the clinical and organisational complexities of screening and treating where the benefit to the pregnancy cannot be demonstrated.

Recommendations

20. If the above policy is accepted it is also recommended that the NCSP should be approached regarding joint work to develop guidance for healthcare professionals who receive requests for chlamydia tests during pregnancy. This would provide an opportunity to discuss research priorities.

Outstanding issues

21. The review and consultation highlighted the importance of debates around the purpose of screening in pregnancy, in particular whether screening should be undertaken to address aims which were not linked to the pregnancy itself. This may be of relevance other evidence reviews.

Action

22. The UK NSC is asked to consider the above issues.