UK NATIONAL SCREENING COMMITTEE

Review of Screening for Cytomegalovirus in the Antenatal and/or the Neonatal Periods Policy Position Statement

25 April 2012

Aim

1. This note provides background to the agenda item addressing the review of the evidence for newborn screening for cytomegalovirus (CMV). One response to the consultation was received. This and the review are attached for information.

Current policy and previous review

2. The last time the UK National Screening Committee (UK NSC) formally considered the evidence for screening for CMV was in 2000.

3. Key issues in the review relating to antenatal screening included the mother to child transmission rate, the natural history and the lack of interventions. Newborn screening was not recommended largely due to the lack of an effective intervention.

4. The current policy is 'Screening should not be offered'.

Review process

5. The document was considered by the Fetal, Maternal and Child Health Co-ordinating Group in November 2011. The review was posted on the UK NSC website for three months. The Health Protection Agency and the Royal College of Obstetricians and Gynaecologists were contacted directly for comments.

6. The IDPS West Midlands Microbiology Group submitted a response which is attached. This supported the content and conclusions of the review.

Recommendation

7. The UK NSC is asked to agree

(i) the policy position on screening for CMV in the antenatal and neonatal period as:-

'Screening for CMV in the antenatal and neonatal periods should not be offered. In pregnancy, there is uncertainty regarding natural history of primary and recurrent CMV as it relates to the risk to the fetus. The screening test for susceptibility lacks sufficient sensitivity and there is uncertainty regarding the further investigations needed to refine the risk to the fetus in women with primary infection. No interventions have been shown to be effective in preventing maternal infection or reducing the risk of transmission to the fetus.

In the neonatal period, the available tests have not been shown to be sufficiently reliable for screening and there is no clear evidence of benefit from the available intravenous or oral antiviral therapies.'

(ii) to agree that the policy for screening for CMV in the antenatal and neonatal periods should be reviewed in three years' time unless there is significant new peer reviewed evidence in the meantime.

UK National Screening Committee

UK National Screening Committee
Cytomegalovirus: an evidence review

Consultation comments pro-forma

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Section and / or page number	**Text or issue to which comments relate**	**Comment** *Please use a new row for each comment and add extra rows as required.*
Section 6	Recommendations	We agree that the introduction of either maternal or neonatal screening at this stage is not appropriate and should wait further research.
Other research	Vaccine development	This is an important area: if a suitable vaccine can be produced and if effective without causing a persistent infection which could run the risk of reactivation; then a strategy similar to rubella could be feasible with screening for susceptibility and post natal vaccination of the mothers.
Neonatal screening	Investigation of outcomes	Samples must be collected in the first two weeks after birth to identify those infected. It is understood that not all 'infected' will be adversely 'affected' and more research should be done to investigate predictors of outcome. A pilot study where all babies were investigated for infection at birth and followed up to give more data about outcomes in all infected infants not just those presenting with signs or symptoms at birth. This would require the collection of a suitable sample from all infants born at "pilot site" maternity units, with the consent of the mothers. All infected infants would be followed up defined time points with clinical

		examination and further samples for CMV viraemia. We agree that better sensitivity is obtained through sampling urine and part of the pilot study would require the development of a suitable collection 'device'/'system' for neonatal urine. Possibly some absorbent 'pad' placed inside a nappy and collected before discharge from the maternity unit. Part of the device would be a bottle in which the 'pad' could be placed with a filter through which the urine could be 'centrifuged' on receipt in the laboratory. The urine samples could then be processed more simply than extracting blood from the neonatal dried blood spots (DBS). Consideration should be given for support for such a project.