

Congenital Syphilis in Children Under 2 Years of Age

Abstract Between 2000 and 2007, diagnoses of infectious syphilis in women rose by 474% (from 78 to 448). As incidence has risen cases of congenital syphilis have emerged. In recent years around 6 cases have been reported each year through genitourinary medicine clinics but this probably only represents 30% to 50% of the cases that occur. Cases can be prevented through antenatal screening and appropriate treatment. Control methods are highly cost effective but are dependent on well structured healthcare pathways. The re-emergence of congenital syphilis reflects a failure of prenatal care delivery systems as well as syphilis control programmes and concerns have been raised about the effectiveness of the present control strategies. In particular, control efforts have been restricted by the absence of comprehensive systematic national surveillance of congenital syphilis. This study aims to instigate surveillance of congenital syphilis to accurately estimate the incidence of congenital syphilis, identify factors associated with cases of congenital infection and inform efforts to improve healthcare systems to ensure that women and their babies are managed appropriately. The investigation compliments a study of antenatal screening pathways being undertaken by the Syphilis Task Group, a sub-committee of the National Screening Committee.

Principal Investigator Dr Ian Simms
Epidemiologist
Health Protection Agency Centre for Infections
61 Colindale Avenue
London NW9 5EQ
Telephone 020 8327 7571
E-mail: ian.simms@hpa.org.uk

Co-investigators Dr Pat Tookey; Email: P.Tookey@ich.ucl.ac.uk

Website <http://bpsu.inopsu.com/studies/current.html>

Background If a woman has syphilis during pregnancy, infection may be transmitted to the foetus *in utero*. This may lead to stillbirth, neonatal death, or disorders such as deafness, neurological impairment, and bone deformities. As such, congenital syphilis is a distressing condition, which is costly to health care systems.

Coverage United Kingdom and Republic of Ireland

Duration January 2010 to December 2012

Research Questions

- To determine the incidence of congenital syphilis in children under 2 years of age over a three year period.
- To compare the incidence, management and presentation of cases with that observed in the similar UK study carried out in the 1990s which used a similar methodology (Hurtig A-K, 1998).
- To compare the coverage of the available routine surveillance systems.
- To assess the proportion of congenital cases identified/not identified through antenatal screening, and identify factors associated with failure to identify maternal infection, or prevent congenital infection.

Case definition

Any child under the age of 24 months with a confirmed or presumptive diagnosis of congenital syphilis or acquired syphilis should be reported on the BPSU orange card.

Inclusion criteria

Only children diagnosed with congenital syphilis under the age of 24 months are to be included in the study.

Reporting instructions

Please report any infant seen for the first time in the UK or the Republic of Ireland since January 2010 who satisfies the case definition **regardless of country of birth**.

Methods

Paediatricians reporting a case through the orange card system will be sent a questionnaire which explores demographic and clinical information about the infant and mother. A postage paid return envelop will be enclosed with the questionnaire.

Ethics approval

This study has been approved by the London REC (Ref: 09/H0718/44).

Funding

Health Protection Agency

References

- 1 Simms I, Ward H. *Sex Transm Infect* 2006;**82**:1.
- 2 Williams K. *Community Medicine* 1985;**7**:35-42.
- 3 Cross A, et al.. *Arch Dis Childhood* 2005;**90**:1045-6.
- 4 Hurtig A-K, et al.. *BMJ* 1998;**317**:1617-19.

