PostScript

LETTERS

Detection and follow up of infants at risk of congenital syphilis

We note with interest the findings reported by Cross *et al* regarding the risk of an increase in the number of cases of congenital syphilis in the UK.¹ Following three babies with congenital syphilis presenting to this hospital in 2003, we carried out an audit to investigate the treponemal antibody prevalence in sera collected at booking from the antenatal clinic, assess the adequacy of antibiotic therapy of pregnant women with suspected syphilis, and check the follow up of their infants.

Maternal booking bloods from March 2000 to February 2002 were reviewed for positive treponemal serology. The screening assay detected total treponemal antibody (IgG and IgM). A rapid plasma reagin (RPR) and *Treponema pallidum* particle agglutination (TPPA) assay were carried out if a sample was reactive. All women with positive treponemal serology detected for the first time on antenatal screening should be treated as if they had syphilis, irrespective of the recognised cross reactivity with yaws, pinta, and bejel. The case notes of mothers with positive serology were reviewed and the adequacy of treatment sufficient to prevent vertical transmission of syphilis assessed.² Samples collected from infants born in the study period were assessed in which "syphilis serology" had been requested. The case notes of those

with positive treponemal serology were reviewed. Overall, 8517 women were screened, of whom 70 had positive treponemal serology (seroprevalence = 0.8%) and 62 (89%) were of Afro-Caribbean origin. Forty three of the 70 women were diagnosed for the first time during pregnancy (fig 1). Twenty three received inadequate treatment to prevent vertical transmission. Five women, in whom syphilis had been diagnosed previously, received inadequate treatment. Four women had early latent syphilis, one had been inadequately treated and had the pregnancy terminated. Twenty seven women who had received suboptimal therapy had evidence of late latent syphilis (more than two years since infection). Of the 63 infants born at this hospital, 23 did not have a record in their notes of positive maternal treponemal serology, 29 (46%) were screened at birth, 9 (14%) at 3 months, 5 (8%) at 6 months, and 1 (1.5%) at 1 year.

In this study, we have shown a high prevalence of antenatal treponemal infection well over the national average.³ Difficulties were identified in the screening and follow up of the infants of women with positive treponemal serology, including inadequate identification of infants at risk and poor outpatient clinic reattendance. Together with the findings reported from southwest London,¹ we suggest that these problems are not merely a local phenomenon. In order to address the issues highlighted in our study, maternal results are now included in the infants' notes, contact tracing methods

similar to those used in sexual health clinics are being applied to non-attenders, and a specific team including a named paediatrician, health advisor, and phlebotomist are based in the sexual health clinic to ensure that consistency in follow up is maintained.

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References

- 1 Cross A, Luck S, Patey R, *et al*. Syphilis in London circa 2004: new challenges from an old disease. *Arch Dis Child* 2005;**90**:1045-6.
- 2 Ingall D, Sanchez PJ. Syphilis. In: Remington JS, Klein JO, eds. *Infectious diseases of the fetus and newborn infant*, 5th edn. Philadelphia, PA: WB Saunders, 2001:643-81.
- 3 Newell M-L, Thorne C, Pembrey L, *et al*. Antenatal screening for hepatitis B infection and syphilis in the UK. *Br J Obstet Gynaecol* 1999;**106**:66-71.

Figure 1 The outcome of women screened for treponemal antibodies in the antenatal clinic.

Respiratory health and baby swimming

Although baby swimming programmes are very popular, there are no reliable data on the potential advantages and risks of this practice for the child's development.¹ In particular, no study has evaluated the possible effects of exposing babies to the volatile chlorination products of indoor pools that recently have been found to affect the lung epithelium and to increase asthma risks.²⁻⁴

We examined a total of 341 schoolchildren aged 10-13 years who were recruited from 10 primary schools in the same area of Brussels, after informed consent was obtained from their parents. The institutional ethics committee approved the study protocol. Among participants, 43 had followed a baby swimming programme before the age of 2 years. Levels of active and combined chlorine in the attended swimming pool were within recommended limits (below 1.5 and 2 mg/l, respectively). Concentrations of trichloramine in pool air ranged from 170 to 540 µg/m³ (mean 325 µg/m³, n = 7) and were probably in the same range 10 years ago since operating conditions had remained unchanged. Information about the health of children and their exposure to risk factors of asthma and allergy was obtained from a questionnaire completed by the parents. Lung epithelium integrity was assessed by measuring serum Clara cell protein (CC16) and surfactant associated protein D (SP-D).⁵ Total and aeroallergens specific IgE in serum were also measured (DPC, LA). Asthma was defined as doctor diagnosed asthma and/or a