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Haemophilus influenzae vaccine

Sir,

Haemophilus influenzae vaccine type b (Hib) was introduced in the United Kingdom in the last months of 1991 and immunization with three doses is recommended for all children aged 12 months or less who have no contraindication to the vaccine.[1] A single injection is recommended for children between 13 and 48 months of age.[1] The information available on the computers of some 1400 selected general practitioners in England and Wales who are using practice computers provided by VAMP Health has been reviewed in order to estimate the extent of use of this vaccine and the incidence of *H influenzae* meningitis.

The participating practices have a similar age–sex distribution to that of the population of England and Wales and a similar geographic distribution. The quality and completeness of the recorded information has been documented in many publications.[2-6]

Among about 34 000 babies born in 1991 fewer than 1% were immunized with Hib vaccine during that year (Table 1). Among 51 681 babies born between January 1992 and June 1993, 48 035 (92.9%) were recorded as having received the Hib vaccine. By January 1993 more than 90% of the babies who were immunized had received three doses starting with a first dose at eight to 12 weeks of age with subsequent dosages given at four to six week intervals thereafter.

During 1991 there were 12 cases of *H influenzae* meningitis recorded in babies aged 12 months or less (Table 1). None was immunized. During the period January 1992 to October 1993, there were seven cases of meningitis recorded in babies aged one year or less. All were recorded in 1992, and none of the babies was recorded as having received the Hib vaccine.

There were an estimated 31 610 babies born in 1990 who remained in the practices until October 1993. All of them would have been at least 13 months of age by January 1992 when the vaccine began being widely used. Among these 31 610 children, 22 663 (71.7%) had received the Hib vaccine. There were 11 cases of *H influenzae* meningitis recorded in 1991 among children aged 13–48 months, eight cases in 1992, and no cases in 1993 as of October — none of these children had received Hib immunization.

These findings are similar to those reported by Booy and colleagues[7] and we conclude that Hib immunization is virtually complete for babies aged 12 months or less in the participating practices and that a majority of children aged 13–48 months are immunized. There were no cases of *H influenzae* meningitis among immunized children, indicating that the vaccine prevented all cases which might have otherwise occurred.

HERSHEL JICK
JULIA M WITHERS

Boston Collaborative Drug Surveillance Program
11 Muzzey Street, Lexington, MA 02173
United States of America

ALAN D DEAN

Drug Research Unit
40 Cumberland Avenue, London NW10 7EH

Table 1. Hib immunization and cases of *H influenzae* meningitis (HiM) among babies aged 12 months or less.

Date of birth	No. of births	No. (%) immunized	No. of cases of HiM (no. immunized)
January–December 1991	34 000[a]	157 (*0.5*)[b]	16[c](0)
January–June 1992	17 527	15 727 (*89.7*)	3 (0)
July–December 1992	17 516	16 699 (*95.3*)	0 (0)
January–June 1993	16 638	15 609 (*93.8*)	0 (0)

[a]Estimated. [b]In 1991. [c]Four of the cases occurred in 1992.

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Obstetric cholestasis

Sir,

Itching in pregnancy is often regarded as a benign condition and may well occur over abdominal stretch marks or over the breasts owing to increased blood supply. This may be relieved by simple advice such as avoiding man-made fibres and applying calamine lotion.

Itching which commences on the hands and feet and then spreads centrally, in the absence of a skin disease, is much more likely to be caused by obstetric cholestasis. This is a condition which sometimes may be a result of an inherited enzyme deficiency, where the liver is unable to cope with the high oestrogen levels of pregnancy. It may only be revealed in multiple pregnancies. The diagnosis is confirmed by finding raised liver enzymes and bile acids (where the latter investigation is available).

The condition is extremely distressing to the mother, particularly as the itching is worse at night. In severe cases it can progress to jaundice and steatorrhoea and then may be associated with an increased risk of postpartum haemorrhage owing to an inability to absorb vitamin K.[1] The condition has, however, more serious implications for the fetus as there is an