SHORT REPORT

Resurgence of paediatric tuberculosis in London

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There is estimated to be over a million new cases of paediatric tuberculosis (TB) globally every year.¹ Children usually acquire TB infection from smear positive adult family contacts, a high proportion going on to develop disease. Childhood disease reflects recent infection, and therefore paediatric TB represents continuing transmission in the population.

In England and Wales, TB notifications declined from 7406 cases in 1982 to 5085 in 1987, rising to 6087 cases in 1998. In London notifications increased from 1445 in 1987 to 2444 in 1998, representing 16% and 40% of the national total respectively in those years. We had noted an increase in referrals of paediatric TB at St George's Hospital. The aim of this study was to identify and describe any evidence for an increasing incidence of paediatric TB in London.

METHODS AND RESULTS

Data were obtained from two main sources: notifications of tuberculosis to the Public Health Laboratory Service Communicable Disease Surveillance Centre 1982-98, and the five yearly National Survey in 1993 and 1998.

The number of cases of TB notified from London in children aged 16 or younger fell from 1982 to 1988 but rose almost every year since then to a total of 231 in 1998, an increase of 130%. No one age group appears to account for the increase (fig 1).

In 1998, 44% of children were Black African, 21% were from the Indian subcontinent (ISC), and 10% were white. Forty eight per cent were born abroad compared to 39% born in the UK. The most common country of origin was Somalia. These patterns have changed since 1993, when 23% were Black African, 50% ISC, and 25% white. In the earlier survey, 53% of children were born abroad.

The majority of children born abroad (85%) developed their disease within five years of entering the UK. Sixty six per cent

of African children were born abroad, compared with 31% from the ISC and 25% of whites.

Two thirds of children were reported to have respiratory disease only. There were five notifications of TB meningitis in 1998.

DISCUSSION

There is now evidence of a recent rise in numbers of paediatric TB cases in London. The rate of increase in children is greater than the rate of increase in all TB cases during the late 1980s and 1990s (130% compared to 65% between 1988 and 1998). The resurgence may be partly caused by an increase in the proportion of paediatric TB cases coinfecting with HIV, but no data on paediatric infection are available to describe this.

In contrast to previous reports,^{2,3} Black African children are now the largest group seen. The increasing proportion of Black African children diagnosed during the 1990s is a trend reflected in TB cases in all ages.

Just under half of the paediatric TB cases are born abroad, a slight fall since 1993. Some of these children are likely to be refugees. Nine per cent of children were recorded as refugees or asylum seekers in 1999 enhanced surveillance data, but this question was poorly answered. In 1998, 12 280 children were accepted for settlement with their families as refugees, or given exceptional leave to remain: 4020 from Africa, 1580 from the Indian subcontinent, and 2900 from South East Asia.⁴

The high proportion of those born abroad emphasises the importance of BCG immunisation for children in immigrant families to protect against severe forms of disease. Both universal and selective neonatal BCG policies are used among London health authorities, with a range of different selection criteria. Selective policies have been shown to be difficult to implement in London.⁵

In London, the importance of broad based partnerships with public health programmes, community based organisations, and managed care plans must be recognised and adopted if the resurgence in childhood tuberculosis is to be brought to an end.

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Figure 1 Notifications of paediatric tuberculosis in London 1982-99, by age group.

Abbreviations: ISC, Indian subcontinent; TB, tuberculosis

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IMAGES IN PAEDIATRICS.....

Lipomatosis of the colon complicating Proteus syndrome

A 12 year old boy with Proteus syndrome (macroductyly, plantar/palmar cerebri-form hyperplasia, lipomata, verrucous naevi, macrocephaly, and/or vascular abnormalities) presented with gross abdominal distension and severe intractable constipation. Magnetic resonance imaging (MRI) scan showed a uniformly hyperintense T1 signal characteristic of adipose tissue widely spread throughout the abdomen and pelvis (fig 1). Laparotomy revealed a huge infiltrating lipomatosis mass encasing the left colon, including the rectum.

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Figure 1 Axial T1 weighted MRI showing diffuse hyperintense signal tissue typical of fat surrounding and separating bowel loops (note similar signal from the diffuse lipomatous abdominal lesion and subcutaneous fat). The lesion extends posteriorly on the left into the paraspinal musculature, displacing psoas anteriorly.

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