

From our small series of patients measuring the C reactive protein concentration seems to provide a highly sensitive and inexpensive screening test which is simple and quick to perform. A normal result in our study excluded a deep venous thrombosis.

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Completeness of registration of childhood leukaemia near nuclear installations and elsewhere in the Oxford region

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The rates reported for childhood leukaemia are higher in areas around nuclear installations than in other areas. The incidence of leukaemia in children who live near nuclear installations is usually compared with that for England and Wales or for the region.^{1,2} It has been suggested that the higher rates reflect more complete registration of cases in areas around installations than elsewhere. To find out whether this affects the reported incidence we need to know whether the published rates for England and Wales or for one region reflect the true incidence of childhood leukaemia.

The districts of West Berkshire and of Basingstoke and North Hampshire either include or are close to the Atomic Weapons Research Establishment at Aldermaston, the Royal Ordnance Factory at Burghfield, and the UK Atomic Energy Authority's establishment at Harwell. Roman *et al* found that during 1972-85 the number of cases of childhood leukaemia registered in electoral wards within 10 km of the installations was 40% higher than expected from national registration rates, the number of cases in the remaining wards of the two local health districts was only 20% higher, and the number in the rest of the Oxford and Wessex regions combined was nearly the same as the number expected.³

Patients, methods, and results

We attempted to find out how complete the registration of cases was in one region. We asked consultant paediatricians at the main hospitals in the Oxford region to compile lists of children from hospital and department records who were treated for leukaemia in 1972-85. We compared these names with those in the National Registry of Childhood Tumours, which is derived from notifications to all regional cancer registries. We excluded data on children treated at the Royal Berkshire Hospital, which was the nearest hospital with a paediatric oncology clinic to two installations, because Roman *et al* previously reported that all the children treated at this hospital in 1972-82 who were residents in the Oxford Regional Health Authority were in the national registry³ and we wished to compare the practice of registration in the area near the installations with the practice elsewhere.

Consultants at hospitals in Amersham, High Wycombe, Banbury, Kettering, Milton Keynes, Northampton, Oxford, and Stoke Mandeville provided lists from which we identified 144 children aged under 15 years who had had a diagnosis of leukaemia during

1972-84. These children were classified by region of registration and of residence as recorded in the national registry (table). A total of 137 (95%) children were in

Region where children with leukaemia lived and where their diagnosis was registered, 1972-84*

Region of residence	Region where registered		Not registered	Total
	Oxford	Other		
Oxford	115	4	6	125
Other	15	3	1	19
Total	130	7	7	144

*Data in the National Registry of Childhood Tumours for 1985 were incomplete at the time of the study.

the national registry. Among the 125 children who lived in the Oxford region, 119 (95%) were in the national register, including four who were registered only in another region. Six children from the Oxford region were not registered.

Comment

Roman *et al* studied cases of leukaemia in children resident in the area of the study that had been recorded in the national registry. They were able to confirm the completeness of registration only for cases diagnosed in 1972-82. This showed that 72 of the 76 (95%) cases that had come to their notice from their own records, other local records, and the national registry had been registered. Clearly, therefore, completeness of registration in the area of their study was no better than in other parts of the Oxford region for which we obtained information. This covered about 60% of all cases registered in the region outside the West Berkshire district.

We conclude that registration bias is unlikely to account for the excess incidence of childhood leukaemia in the vicinity of three nuclear installations as reported by Roman *et al*.³

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