

in Glasgow the average prevalence was 27.3%, but the prevalence ranged from 7.6% in the postcode district of Easterhouse (G34) to 65.9% in Hyndland and Hillhead (G12).

Table II shows the prevalence of breast feeding, according to information obtained from Guthrie cards, and, when available, from SMR2 forms, for all maternity units in Scotland with more than 1500 deliveries a year.

Discussion

The prevalence of breast feeding among babies born in Scotland in 1990 and 1991 was low, with wide variation among districts. Howie *et al* have shown that the prevalence is lower in socially deprived areas than in other areas.³ The large differences in prevalence among hospitals may reflect partly the prevalence in the population of each catchment area and partly the hospitals' policies on breast feeding and the motivation of staff.

Data from Guthrie cards could be used to study the rates in large sections of the country (postcode areas), small localities (postcode districts), and individual hospitals. These data would be valuable in audits of current initiatives on breast feeding and would also enable subsequent initiatives to be targeted at those areas where the prevalence is low.

The prevalence of breast feeding at seven days, from information on Guthrie cards, shows the number of women who continue to breast feed in the first few days

Clinical implications

- The prevalence of breast feeding in Scotland is low
- The prevalence of breast feeding varied considerably among areas and maternity units
- Guthrie cards, which are used to screen for inherited metabolic disease and hypothyroidism are a source of unbiased national data on breast feeding at 7 days of age
- These data could be used to target breast feeding initiatives at areas where the prevalence of breast feeding is lowest and to audit the outcome of these initiatives

after leaving hospital. To show how many women continue to breast feed, accurate figures are needed at six weeks and three, six, and 12 months. The new national child health surveillance record will provide information at six weeks.

Since January 1992 the mother's date of birth has been recorded on Guthrie cards. This would indicate which age groups breast feed their babies. If rates for young mothers are poor, intervention through education at school may be appropriate.

The data on Guthrie cards provide accurate and readily accessible information about women who start to breast feed and about breast feeding in individual maternity units and postcode districts. Together with the national child health surveillance record, Guthrie cards provide an ideal means of auditing the outcome of initiatives on breast feeding.

TABLE II—Numbers (percentages) of babies born in each maternity unit with over 1500 deliveries a year in Scotland in 1990 and 1991 who were breast fed

Hospital	Source		
	Guthrie (1990)	Guthrie (1991)	SMR2* (1991)
Aberdeen Maternity Hospital	2005/4005 (50.1)	2701/5275 (51.2)	2439/4706 (51.8)
Eastern General Hospital, Edinburgh	866/1820 (47.6)	1037/2167 (47.9)	1160/2318 (50.0)
Raigmore Hospital, Inverness	810/1708 (47.4)	1004/2053 (48.9)	1000/2179 (47.0)
Simpson Memorial Hospital, Edinburgh	2160/4606 (46.9)	2489/5399 (46.1)	2705/2816 (49.0)
Ninewells Hospital, Dundee	1108/2630 (42.1)	1284/3232 (39.7)	1068/2812 (38.0)
Maternity Hospital, Dunfermline	424/1032 (41.1)	548/1262 (43.4)	NA
Forth Park Maternity Hospital	567/1431 (39.6)	748/1820 (41.1)	980/1535 (39.0)
Queen Mother's Hospital, Glasgow	931/2500 (37.2)	1164/3107 (37.5)	NA
Paisley Maternity Hospital	542/1758 (30.8)	664/2176 (30.5)	NA
Ayrshire Central Hospital	945/3141 (30.1)	1090/3745 (29.1)	NA
St John's Hospital, Livingston	566/1942 (29.1)	632/2081 (30.4)	709/2146 (33.0)
Rutherglen Maternity Hospital	697/2470 (28.2)	887/3039 (29.2)	NA
Stobhill General Hospital, Glasgow	352/1257 (28.0)	514/1794 (28.7)	NA
Falkirk Royal Infirmary	311/1209 (25.7)	435/1623 (26.8)	493/1700 (29.0)
Southern General Hospital, Glasgow	489/1912 (25.6)	574/2222 (25.8)	NA
Glasgow Royal Maternity Hospital	554/2423 (22.9)	698/3123 (22.4)	NA
Bellshill Maternity Hospital	507/3090 (16.4)	681/3739 (18.2)	NA

*Form completed when mother and her newborn baby leave hospital.
NA=Not available.

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Acquired immunodeficiency without evidence of HIV infection: national retrospective survey

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The term idiopathic CD4 T lymphocytopenia has been introduced to describe the syndrome of depletion of CD4 lymphocytes in people with no evidence of HIV infection or other explanation for immunodeficiency.¹ We report a retrospective national survey to identify and characterise cases of unexplained CD4 lymphocytopenia in Australia.

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Methods and results

The National Centre in HIV Epidemiology and Clinical Research asked all specialists in clinical immunology and infectious diseases and other medical practitioners known to have an interest in immune disorders to provide information on any patient who had been diagnosed as immunodeficient on or after 1 January 1985 on the basis of a reduced CD4 lymphocyte count (no specific value was defined) or specific illnesses related to cell mediated immunodeficiency. The patients had to have had a negative result on serological testing for HIV-1 infection, and congenital conditions and immunosuppressive treatment had to have been excluded as causes of immunodeficiency.

Overall, 96 practitioners were contacted in writing. The 42 specialists in infectious diseases and clinical immunology who did not submit a case were contacted by telephone. Twelve case reports were submitted, of

Case No	Age at diagnosis (years)	Sex	CD4 lymphocyte count*		Diagnosis indicating immunodeficiency	Patient had AIDS defining condition	History of exposure to risks related to HIV†	Year of diagnosis
			Absolute No ($\times 10^6/l$)	% Of total lymphocytes				
1	56	M	11	1	Oesophageal candidiasis; cryptococcosis (of meninges)	Yes	Blood transfusions 1982-3‡	1985
2	70	M	130	18	<i>Mycobacterium avium</i> complex (of lung); cryptococcosis (of lung)	No		1986
3	55	F	550	16	Cryptococcosis (of lung and meninges); disseminated varicella zoster	No		1990
4	35	M	24	3	Cryptococcosis (of lung)	No		1991
5	33	M	273	10	Cryptococcosis (of brain)	Yes		1991
6	32	M	150	17		No		1992
7	29	F	285	19	Oral candidiasis	No		1992

* At diagnosis of immunodeficiency.

† Other than heterosexual contact.

‡ Six of the seven donors whose blood or blood products had been transfused were tested for antibodies to HIV-1 and found to be negative.

which seven satisfied the definition of idiopathic CD4 T lymphocytopenia, with a CD4 lymphocyte count of $<300 \times 10^6/l$ or $<20\%$ of total lymphocytes on more than one occasion (table).¹ Supplemental tests (polymerase chain reaction and culture) for HIV-1 infection in three cases and tests for HIV-2 infection in four yielded negative results.

Five patients had cryptococcosis (three at extrapulmonary sites). The three cases for which results of serotyping were available were due to *Cryptococcus neoformans* var *neoformans*. Only one patient (case 1) gave a history of exposure to a factor associated with an increased risk of HIV infection: he had received multiple blood transfusions during 1982-3.

CD4 lymphocyte counts six months after the diagnosis of immunodeficiency were available in all cases. In all except one (case 6) CD4 lymphocytes as a percentage of total lymphocytes remained $<20\%$. In three cases (3, 5, and 7) the absolute CD4 lymphocyte count was $>300 \times 10^6/l$. All seven patients were alive one year after diagnosis.

Comment

Acquired immunodeficiency had been diagnosed in five of the cases during 1990-2 and in only two during 1985-9. Cases of idiopathic CD4 T lymphocytopenia may simply be rare cases of unexplained immunodeficiency reported by doctors familiar with HIV infection and with ready access to laboratories that perform CD4 lymphocyte estimations. Attention in the lay and medical press may also have encouraged recall and reporting of cases.

Increased use of T lymphocyte counts in the investigation of unexplained symptoms of apparent immunodeficiency has led to cautions against the overinterpretation of results.² Of the patients reported on here, the two with the most recent diagnosis of immunodeficiency (in 1992) had the least clinical evidence of immunodeficiency.

Five of the seven patients in our series had cryptococcal disease. Müller argued that the polysaccharide capsule of *C. neoformans* is immunosuppressive, possibly resulting in lowered CD4 lymphocyte counts

secondary to the infection itself.³ As we do not know the CD4 lymphocyte counts before cryptococcosis occurred we cannot evaluate this hypothesis.

The patients' exposure histories had little in common with the reported histories of people with AIDS in Australia, most of whom seem to have acquired HIV infection through homosexual contact.⁴

Our series highlights some of the difficulties associated with the definition of idiopathic CD4 T lymphocytopenia. CD4 lymphocyte counts may vary widely both within and among people, whether immunocompromised or not, although counts persistently below $300 \times 10^6/l$ seem to be rare in the absence of an identified cause of immunosuppression.⁵ The definition of idiopathic CD4 T lymphocytopenia requires more than one abnormally low count, but the interval between the measurements is not specified. CD4 lymphocyte counts during or after certain opportunistic infections may be transiently lowered as a direct effect of the infecting organism.

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ONE HUNDRED YEARS AGO

LADY DOCTORS

At the annual meeting of the British Medical Association at Nottingham in 1892, it was decided that women should be eligible for membership of the Association. The question was raised after due notice given by Dr. Galton, who moved that Article 4 of the Articles of Association should be altered, by expunging the words, "No female shall be eligible for election as a Member of the Associa-

tion." He pointed out that the excluding clause had been inserted in 1878 at the annual meeting at Bath, after a plebiscite of the members, then numbering about 7,000, 3,072 had then voted against the admission of women, and 1,051 in their favour. Since 1878 the number of ladies in the medical profession in the United Kingdom had risen from 8 to 135. The resolution was seconded by Mrs. Garrett Anderson, who was a member before 1878, and it was carried almost unanimously. (*BMJ* 1894;i:36.)