Correspondence

Journal of Medical Genetics, 1981, **18**, 158–159

Birth frequency of bilateral renal agenesis

SIR,

In a family study of renal agenesis (*J Med Genet* 1979; **16**: 176–88), we reported an estimate of the birth frequency in 1974 of bilateral renal agenesis, based on death and stillbirth certificates supplied by OPCS, which gave Potter's syndrome, or a not fully specified renal anomaly or agenesis, as an underlying or one of multiple causes of death. For the deaths from 'multiple causes', we had only a 25% sample of certificates and we had no information on stillbirths because of 'multiple causes'; but for deaths and stillbirths where the underlying cause was renal agenesis, we had a 100% sample. The diagnosis was confirmed from necropsy reports in 50 cases. In four instances where a necropsy had been performed, but no report was available, we included the case because the death certificate or the paediatrician stated the cause of death to be renal agenesis. In two instances where no necropsy had been performed, but the death certificate stated Potter's syndrome and congenital abnormalities, we scored each case as a $\frac{1}{2}$ only. The estimated birth frequency was 0.122 per 1000 total births.

We now report data, applying the same criteria, for the three subsequent years. These are shown in the table together with the data for 1974. In 1977, as in 1974, only a 25% sample of deaths from multiple causes was available and so the number was multiplied by 4.

The birth frequency per thousand total births for each of the four years is: 1974, 0.122; 1975, 0.096; 1976, 0.095; 1977, 0.120. The figures for 1974 and 1975 do not include stillbirths from multiple causes. If, say, an allowance of three further cases is made

for this deficit, the birth frequency estimate for 1974 and 1975 would be 0.127 and 0.101, respectively. Inevitably these figures will be somewhat of an underestimate.

C O CARTER AND KATHLEEN EVANS
MRC Clinical Genetics Unit,
Institute of Child Health,
30 Guilford Street, London WC1N 1EH

Familial partial 14 trisomy

SIR,

A familial partial 14 trisomy was reported in the February 1979 issue of the *Journal*.¹ On the basis of banding there were four affected subjects, 47,+der(14),t(9;14)(p24;q21), and three maternal translocation carriers t(9;14)(p24;q21). The chromosomal rearrangement includes triplication of the locus for the enzyme nucleoside phosphorylase (NP). George and Francke² have found that NP (purine-nucleoside:orthophosphate ribosyltransferase, EC 2.4.2.1) activity expressed in red blood cells is proportional to the number of alleles present. They assayed erythrocytes from a series of normal controls and subjects with partial 14 duplications to localise this enzyme. Three patients with partial 14 trisomy had NP activities of 21.9, 21.8, and 18.9 units of activity/g haemoglobin and were thought to demonstrate the activity of a triple gene dose. Sixty-one normal persons had a mean activity of 12.7 units, range 7.9 to 18.0. With this assay procedure, our patient DT had 21.7 units of NP activity/g haemoglobin (mean of eight normal people 15.5, range 13.0 to 17.9). These results support the reported karyotypes, the mapping of NP to region 14q13,

TABLE Birth frequency of bilateral renal agenesis estimated from death and stillbirth certificates (England and Wales)

Year of birth	Confirmed at necropsy								Estimate where necropsy not performed or report not available	Estimated total	Total births	Estimated birth frequency per thousand	
	Deaths				Stillbirths								
	Underlying M	F	Multiple M	F	Underlying M	F	Multiple M	F					
1974	30	4	(25% sample)		4	4	Not available		4	1	79	647 060	0.122
1975	24	10	13	3	1	2	Not available		3.5	2	58.5	609 740	0.096
1976	30	10	3	0	5	1	2	1	2.5	1.5	56	589 979	0.095
			(25% sample)										
1977	18	11	3	3	4	0	1	2	5	3.5	68.5	574 664	0.120