SHORT REPORTS

Deaths from Rh haemolytic disease in England and Wales in 1984 and 1985

Since 1977 deaths registered as being due to haemolytic disease of the newborn in England and Wales have been analysed in an attempt to discover the circumstances in which each mother became immunised and also to assess the accuracy of certification of deaths. Results from 1977 to 1983 have been published previously[1]; we describe here results up to 1985.

Methods and results

Cases were categorised as described previously.[1]

During 1977-84 there was a substantial reduction in the death rate from Rh(D) haemolytic disease, but deaths in 1985 were as numerous as in 1983[1] (see table), suggesting that from now onwards the rate of fall may be less.

The table shows the circumstances in which each mother was immunised to Rh. Twenty eight of the 58 women in 1984-5 had not been given anti-Rh after a previous pregnancy (category 1); of these, six had been immunised before 1970, when anti-Rh immunoglobulin was not widely available. Among the 22 immunised from 1970 onwards the reasons for the omission of immunoprophylaxis appear to have been as follows: anti-Rh not available locally (four), Rh grouping errors (three), pregnancy terminated before the 30th week and treatment with anti-Rh believed to be unnecessary (10 (eight before 15th week)), full term delivery (reasons for "not given anti-Rh" unknown) (five).

Whereas there was a substantial fall in the numbers of cases in category 1, the number of deaths in the offspring of women immunised during their first pregnancy (category 2) or who became immunised despite having been given anti-Rh after their first delivery (category 3) showed very little fall in 1977-85, perhaps surprisingly in view of advances in the treatment of haemolytic disease.

Deaths from haemolytic disease due to antibodies other than anti-D (category 5) also remained roughly constant. In 1977-85 there were about four such cases a year; the antibodies concerned were anti-c±−E (23), −K (eight), −c+−K (two), −C (one).

The numbers of deaths registered as being due to haemolytic disease but judged on inspection of death certificates and hospital notes not to have been so (category 6) fell strikingly. One of the remaining relatively common causes of false certification is failure to realise that hydrops fetalis may be non-immunological, often associated with congenital abnormalities.[2]

Comment

Our analysis is based on registered deaths and, since stillbirths before the 28th week are not registrable in England and Wales, must underestimate the true mortality from haemolytic disease. Experience in the Oxford area—seven registered and 19 unregistered "pregnancy losses"[3]—suggests that the underestimate may be large. Figures from Yorkshire are apparently similar: in 1983-5 there were five registered deaths and 16 cases in which a pregnancy in an Rh immunised woman ended in fetal death before the 28th week of pregnancy (L A D Tovey, personal communication). Figures from two other centres, however, give a different impression. In Northumberland and Durham records are available for almost all women whose pregnancy continued for more than 16 weeks. Registered deaths (87) represented about two thirds of the total loss from haemolytic disease (E Hey, personal communication). In Finland, where all stillbirths are registrable, regardless of gestational age, virtually all Rh immunised pregnant women are tested by the Finnish Red Cross Blood Transfusion Service. Of 42 deaths from Rh haemolytic disease occurring in 1975-85, 10 were stillbirths occurring before the 28th week of pregnancy (J Eklund and H R Nevanlinna, personal communication). The variation in these estimates emphasises the difficulty of discovering the true mortality from Rh haemolytic disease.

Our data suggest that many women become immunised because they are not given anti-Rh immunoglobulin after an abortion. Even more important is the finding that in about half the mothers whose infants died in 1984 and 1985 Rh immunisation could have been prevented only by antenatal treatment. The introduction of antenatal immunoprophylaxis combined with recent advances in treating the affected infant[4] should eventually reduce mortality from this disease to a very low level.

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2 Hutchinson AA, Drew JH, Yu VYH, Williams ML, Fortune DW, Beischer NA. Nonimmunologic hydrops fetalis: a review of 61 cases. *Obstet Gynecol* 1982;5:347-52.
3 Bowell PJ, Entwistle CC, MacKenzie IZ. Deaths from Rh(D) haemolytic disease of the newborn in England and Wales. *Br Med J* 1985;**291**:1351.
4 Rodeck CH, Nicolaides KH, Warshot SL, Fysh WJ, Gamsu HR, Kemp JR. The management of severe rhesus isoimmunization by fetoscopic intravascular transfusions. *Am J Obstet Gynecol* 1984;**150**:769-74.

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Deaths from Rh haemolytic disease (stillbirths and livebirths) 1977 to 1985

Category	Description	1977	1978	1979	1980	1981	1982	1983	1984	1985
1	No postnatal anti-Rh immunoglobulin after one or more previous deliveries:									
	At least one of which occurred before 1970 (before anti-Rh Ig widely available)	53	40	40	31	14	17	4	1	5
	Occurring from 1970 onwards (anti-Rh Ig widely, but not universally, available)	32	28	24	23	12	16	12	11	11
2	Anti-D detected during or within seven days after first delivery (immunised during first pregnancy)	12	11	10	6	6	5	8	3	9
3	Immunised despite postnatal anti-Rh after previous pregnancies (failures of prophylaxis)	9	7	12	11	9	6	9	9	8
4	Immunised by blood transfusion	—	2	1	1	—	—	1	1	—
Total deaths from Rh(D) haemolytic disease*		106	90†	87	72	41	44	34	25	33
Deaths per 100 000 births		18·3	15·0	13·6	9·2	6·4	7·0	5·2	3·9	5·0
5	Haemolytic disease not due to anti-D	4	3	3	4	3	4	4	5	4
6	Not haemolytic disease*	45	49	21	28	14	19	17	9	7
Total number of death and stillbirth certificates provided by the OPCS for cases in which haemolytic disease was thought to be implicated		155	142	111	103	57	67	55	39	44

*Authors' assessment after scrutiny of notes.
†Includes two cases which could not be categorised.

Acute psychosis as idiosyncratic reaction to quinidine: report of two cases

Confusion, delirium, and psychosis are known neuropsychiatric manifestations of quinidine toxicity (cinchonism).[1] When used in the usual therapeutic doses quinidine rarely has effects on the central nervous system. Nevertheless, in people with an idiosyncrasy cinchonism may occur with small doses.[2] We describe two patients presenting with acute psychotic manifestations as an idiosyncratic reaction to quinidine.