Medical Memoranda

Persistent Anaemia in a Breast-fed Infant with Erythroblastosis Foetalis

The fact that anti-Rh agglutinins may be excreted in the breast milk is becoming increasingly well recognized, but the danger of continued breast-feeding to infants suffering from erythroblastosis foetalis is not commonly realized. The following case may be of interest in view of the fact that the haemolytic process was probably maintained by the baby receiving anti-Rh agglutinins via the mother's milk.

CASE REPORT

Female child, born May 24, 1946. Normal pregnancy and labour. Birth weight 8 lb. (3.6 kg.). Slightly jaundiced on day of birth, and this increased in intensity until she was admitted to hospital four days later. Her parents are healthy. They have one other child, aged 6½ years, who was quite normal as a baby. There was a still-birth 2½ years ago; the cause of this is unknown. No miscarriages. No family history of jaundice.

On admission the baby was deeply jaundiced, the liver was just palpable, and the spleen was enlarged almost to the level of the umbilicus. No other abnormal physical signs. Blood: Hb, 57%; R.B.C., 2,100,000 per c.mm.; C.I., 1.3. The red cells exhibited anisocytosis and macrocytosis, and there were a few intermediate and late normoblasts. Blood group O (IV). The mother was found to be Rh-negative, and her blood to contain Rh agglutinins; the father, Rh-positive. The baby was Rh-positive.

A transfusion of 3 oz. (85 ml.) Group O (IV) Rh-negative blood was given on the day of admission. The following day her Hb was 105%. During the next few days the jaundice faded gradually, and her general condition improved. She became progressively more anaemic, however, as can be seen from the accompanying chart, and on June 12 the Hb was 53%. She was again given a transfusion of 3 oz. (85 ml.) of Group O (IV) Rh-negative blood. This transfusion gave only a slight improvement in the severity of the anaemia, and on June 21 the Hb was 53%, R.B.C. 2,440,000 per c.mm., and C.I. 1.1. Throughout this period the baby had been breast-fed and, in view of the prolonged anaemia, the possibility of Rh antibodies being secreted in the breast milk and absorbed by the baby was considered. An examination of the mother's milk showed it to contain weak anti-Rh agglutinins. Breast-feeding

was therefore discontinued on June 24 and artificial feeds substituted. An examination of the blood two days later showed that the Hb had fallen to 38%, and a further transfusion of 6 oz. (170 ml.) Group O (IV) Rh-negative blood was given. Three days later the Hb was 77% and since this date the Hb level has been maintained between 66% and 75%, with a corresponding rise in R.B.C. Throughout the period of treatment the baby has received one hog's stomach pastule twice daily.

COMMENT

It is a well-recognized fact that Rh antibodies may be secreted in the colostrum, and a case in which such antibodies were found in the milk up to the fourteenth day was described by

Langley and Stratton in 1944. In this case weak anti-Rh agglutinins were demonstrated in the breast milk on the thirty-first day. Throughout the time that the baby was breast-fed the haemolytic process continued. There was a further fall in the haemoglobin level for a few days after breast-feeding had been discontinued, probably due to the fact that antibodies absorbed from the milk remained active for a short period after artificial feeding had been started. The child responded well to a further transfusion, and has maintained a good haemoglobin level ever since.

My thanks are due to Dr. Charles Pinckney and to Col. Owen Pritchard, medical superintendent of this hospital, for permission to publish this case.

ROSEMARY DAVIES, M.B., B.S.

Children's Unit, Old Windsor Emergency Hospital.

Association of Erythema Multiforme with Herpes Simplex

Urbach (1933) was the first to draw attention to erythema multiforme occurring seven to ten days after an attack of herpes simplex. Forman and Whitwell (1934) were apparently unaware of Urbach's work when they reported 12 cases of erythema multiforme associated with herpes simplex. These authors tabulated the clinical similarities between the two conditions. Both are liable to recur, particularly in spring and autumn; both are provoked by infections, especially the common cold; and both may be caused by food sensitivity, by sunlight, and by menstruation. Urbach (1937) reported a further 20 cases, and described some experimental work supporting his hypothesis that an allergic mechanism is involved. Anderson (1945) reported 10 cases, and claimed satisfactory results from treatment by scarifying vaccination with smallpox vaccine four or five times at intervals of two weeks—a procedure previously found effective in some 80% of cases of herpes simplex. Six of his cases of erythema multiforme were treated by this method; four of these remained free from recurrences for from two to five years after one or two courses of vaccination, while another showed a reduction in the severity and frequency of attacks. It is of interest that in one successful case there was no history of recent herpes, but the patient had suffered from it some years previously. A new case, which demonstrates clearly the association of the two conditions, is recorded here.

An aircraftman aged 20 had suffered from "cold sores" since the age of 10, the attacks occurring most frequently in the spring and autumn. In 1944 he had his first attack of erythema multiforme. His second attack occurred about six months later. Since then he has had recurrences of varying severity every two or three months. He was first seen on Aug. 21, 1946. On examination herpetic scars were discovered round the mouth, and the hands and forearms presented lesions of erythema multiforme of iris type. He said that this attack was an unusually mild one. A full blood count was within normal limits. Clinical and radiological investigations revealed no dental or nasopharyngeal infection. He is certain that every attack occurs about ten days after an attack of herpes. He has in fact come to recognize the herpes as a warning signal of a probable attack of erythema multiforme. He never has erythema multiforme without the herpes, but occasionally a mild attack of herpes is followed some ten days later by a sensation of warmth and generalized skin irritation, lasting about one day, without the development of skin lesions. He is being treated by multiple vaccination.

I would like to thank Wing-Comdr. H. E. Bellringer for the interest he has taken in this case and for the assistance he has given me.

ARTHUR ROOK, M.B., B.Ch.,
Late Squadron-Ldr., R.A.F.V.R.

REFERENCES

- Anderson, N. P. (1945). *Arch. Derm. Syph.*, Chicago, **51**, 10.
- Forman, L., and Whitwell, G. P. B. (1934). *Brit. J. Derm. Syph.*, **46**, 309.
- Urbach, E. (1933). *Zb. Haut. Geschlkr.*, **46**, 413.
- (1937). *Ibid.*, **57**, 12.
- (1943). *Allergy*, p. 901, New York.

A Cancer Board for the counties of Lancashire, Westmoreland, Derbyshire, and Cheshire, but excluding Liverpool and Warrington, has been set up under the Cancer Act, 1939, to arrange facilities for diagnosis and treatment of cancer in the working area of the Christie Hospital and the Holt Radium Institute. The Board will bear the cost of maintaining and treating patients.