Medical Memoranda

Rubella Syndrome: Escape of a Twin

Brit. med. J., 1966, 1, 1403

The ability of the rubella virus to cause damage to the embryo is not in doubt. There are, however, different views about the degree of risk to the infant when there is exposure to rubella in early pregnancy. Butler *et al.* (1965) suggest that a subclinical infection with seroconversion can occur without clinical defects in the child. To show that this is indeed possible we report the outcome of a twin pregnancy in which a mother had rubella in the early months. One infant is normal but the other severely affected with the classical "rubella syndrome."

CASE REPORT

The patient, a full-term infant (one of a twin pregnancy), was delivered by forceps as a breech after a transverse lie. He was shocked at delivery, but settled down well and thrived. The twins were binovular. The maternal notes reported two separate placentae.

The patient first came to notice at the age of 1 year, when visual disturbance was reported. He was noted to have bilateral cataract with slight buphthalmos on one side and microphthalmos on the other. While he was in hospital for treatment (V. T. L.) it was discovered that he had a congenital heart lesion. He was noted to be much smaller than his twin, and generally retarded in physical and neuromuscular development.

Investigation of his heart (by G. H. W.), including catheterization and angiograms, showed a slight pulmonary valvular stenosis and slight stenosis at the origin of the right pulmonary artery; there was a loud precordial systolic murmur. Further inquiry revealed that the mother had had a mild illness (with a rash) early in pregnancy. The exact date was not recalled, and no diagnosis had been reached or attempted. The suspicion of rubella syndrome was raised, and blood was sent to Dr. J. A. Dudgeon at Great Ormond Street. He reported that the child had a rubella-neutralizing antibody titre of 1/256 and his mother 1/64. This strongly suggested that the mother's illness had indeed been rubella, and that the child was affected with the classical syndrome. Blood from his twin brother was obtained at the age of 22 months. Dr. Dudgeon reported that

it showed the same high titre of antibody (1/256). Clinical examination of the twin brother at the age of 3 years revealed a normal child with normal eyes. There was no evidence of any heart lesion and he was developing normally in every way.

The patient remained a retarded little boy with a head circumference well below the 10th percentile (18 in. (46 cm.) at 3 years). There was some early speech retardation, but he has developed clear (but limited) speech. There was no significant detectable deafness.

The pattern of eye, heart, and brain lesions often associated with a small head circumference is familiar in the fully developed rubella syndrome. The history, serology, and clinical findings leave no room for doubt that the patient had had an intrauterine rubella infection.

COMMENT

The absence of clinical abnormalities and the necessity to seek retrospective evidence of rubella infection in pregnancy would have made it most unlikely that the normal child's blood would have been investigated if it had not been for the existence of his affected twin. There seems no doubt, however, that he *was* infected with the rubella virus at the same time as his mother and twin brother, but that he has escaped damage. This confirms suspicions previously held that there is a good deal of individual variation in the degree of damage to the individual foetus in authentic cases of maternal rubella infection.

We are grateful to Dr. J. A. Dudgeon for permission to publish his results on antibody-neutralization tests.

R. M. FORRESTER, M.A., M.D., M.R.C.P., D.C.H.,
Consultant Paediatrician, Wigan and Leigh Hospital Group.

V. T. LEES, M.B., CH.B., D.O.M.S.,
Consultant Ophthalmic Surgeon, Wigan and Leigh Hospital Group.

G. H. WATSON, M.B., M.R.C.P., D.C.H.,
Consultant Paediatrician, Royal Manchester Children's Hospital.

REFERENCE

Butler, N. R., Dudgeon, J. A., Hayes, K., Peckham, C. S., and Wybar, K. (1965). *Brit. med. J.*, 2, 1027

Idiopathic Pulmonary Haemosiderosis and Rheumatoid Arthritis

Brit. med. J., 1966, 1, 1403-1404

Idiopathic pulmonary haemosiderosis is characterized by haemoptysis and anaemia due to recurrent intrapulmonary capillary bleeding. The subject has been reviewed by Soergel and Sommers (1962). The aetiology is unknown, though many theories have been advanced. Steiner (1954) and Steiner and Nabrady (1965) have suggested that the disorder has an immuno-allergic basis.

In a disorder of unknown aetiology, where there is suspicion that an immunological mechanism may be involved, the occurrence in the same patient of other diseases in which an immunological defect is commonly assumed is of interest. This report concerns a patient with idiopathic pulmonary haemosiderosis which has become quiescent; it has, however, been followed by severe rheumatoid arthritis.

CASE REPORT

The patient was born in January 1947, and at the age of 1 year she developed "pneumonia." Persistent pallor and cough followed, and she was admitted to Dudley Road Hospital, Birmingham, in March 1948. She was febrile and extremely pale; resonance was