(b) *Ministry of Health.*

(i) Central Health Services Council—Committee on the Functions of the District General Hospital. At the invitation of this body, the Association submitted written evidence which had been in the main prepared by the Hospitals Committee.

(ii) Standing Medical Advisory Committee—Joint Subcommittee with the Advisory Committee on Health and Welfare of Handicapped People. The Association submitted written evidence to this body on the health and welfare services for epileptic people.

Correspondence with the Ministry of Health took place regarding the early detection of congenital abnormalities, the classification of lactose-free foods, and the welfare of children in long-stay hospitals.

(c) *Home Office.*

Committee on Local Authority and Allied Personal Social Services (Seeborn Committee). The Association submitted invited evidence to this Committee.

(d) *Ministry of Agriculture and Fisheries.*

The Association replied to inquiries regarding Skimmed Milk Regulations, and Claims and Misleading Descriptions on Labels and Advertisements of Food.

9. CORRESPONDENCE WITH OTHER ASSOCIATIONS AND OFFICIAL BODIES.

Royal College of Physicians. The Association was invited to send representatives to an informal meeting concerning the European Common Market and has held informal discussions regarding the training and certification of paediatricians.

British Medical Association. Arrangements are proceeding for the joint meeting to be held in Cheltenham in October 1968.

10. REPRESENTATIVES ON OTHER BODIES.

Reports have been received from the members representing the Association on the following bodies regarding their activities:

National Association for Maternal and Child Welfare—Dr. A. White Franklin.

Medical Commission on Accident Prevention—Professor R. G. Mitchell.

11. RELATIONS WITH OTHER PAEDIATRIC SOCIETIES AND ASSOCIATIONS.

(a) *International Paediatric Association.* The Association made a special grant of £55. 13s. 7d. (Swiss Francs 670) to the I.P.A. and this was gratefully acknowledged.

(b) *Austrian Paediatric Society.* Council has had correspondence with this Society with a view to an exchange of visits.

(c) *Greek Paediatric Association.* An exchange of visits has been considered.

12. DONATIONS.

Council received with gratitude donations from

(a) The Children's Research Fund; (b) Dr. Donald Paterson; (c) Dr. R. C. Jewsbury; (d) Messrs. Cow and Gate Limited, which have been of great assistance in furthering the aims of the Association.

The President then declared the Annual General Meeting closed.

Scientific Sessions

Scientific sessions were held in the Conference Hall at the Intercontinental Hotel, Dublin, on April 25, 26, and 27. Members and guests, including members of the Irish Paediatric Association, attended and the following communications were presented.

O. C. WARD (Dublin). 'Familial Cardiac Arrhythmia.' The occurrence of sudden death in certain children suffering from congenital deafness has been linked with the finding of a prolonged Q-T interval, and this abnormality is considered to predispose to attacks of ventricular fibrillation. Familial cardiac arrhythmia is an allied disorder, first described in Dublin in 1963, in which a family study has shown a high incidence of abnormal prolongation of the Q-T interval and in which sudden death occurred in one child, whose heart, on examination, showed no microscopical evidence of any abnormality of the myocardium or conducting tissue. A sib has been under study over a considerable period, and the attacks of loss of consciousness which are the dominant clinical syndrome have been shown to be due to ventricular fibrillation. The spontaneous onset and spontaneous recovery from a number of these attacks has been documented. The condition has since been described in Italy, South Africa, Sweden, and Poland. The communication covered the family study, pointing to a conclusion that the disorder, unlike the cardio-auditory syndrome, is inherited as a dominant. Biochemical data relating to the onset of the attacks of ventricular fibrillation, and histological confirmation of the normal condition of the myocardium were set out.

MICHAEL J. TYNAN introduced by DR. BONHAM CARTER (London). 'Balloon Atrial Septostomy.' Balloon atrial septostomy was introduced in 1966 by Rashkind and Miller for the palliative treatment of transposition of the great arteries. It has subsequently been applied to the treatment of other conditions where flow across the atrial septum is necessary for survival. We have performed the operation for the following conditions: transposition of the great arteries; tricuspid atresia; pulmonary atresia with intact ventricular septum; total anomalous pulmonary venous connexion; and mitral atresia with transposition of great arteries (TGA) and pulmonary valve atresia.

Forty-nine patients had 54 operations, with no complications directly attributable to the procedure. In TGA the mortality during the first hospital admission was 9 deaths in 37 patients (approximately 25%). This mortality was mainly in infants under 6 weeks of age, i.e. 8 deaths in 20 patients; 5 of these patients had additional cardiac lesions.

In other conditions, the balloon septostomy was performed as an adjunct to surgical palliation of the basic lesion. The effects of septostomy in these conditions was difficult to assess.

Balloon atrial septostomy is a safe and effective palliative operation in transposition of the great arteries. It is suggested that it may be of value as an adjunct to

surgical palliation in tricuspid atresia, pulmonary atresia with intact ventricular septum, and mitral atresia. The place of atrial septostomy in the treatment of total anomalous pulmonary venous connexion was not established.

EDWARD HOWARD introduced by Mr. H. H. NIXON (London). 'Internal Anal Sphincter. Observations on Development and Mechanism of Inhibitory Responses in Premature Infants and Children with Hirschsprung's Disease.' To be published elsewhere.

JOHN LORBER (Sheffield). 'Long-term Prognosis of Subdural Effusions in Infancy.' Of 37 consecutive infants suffering from post-traumatic subdural effusions, 34 survived with an average period of observation of 3 years. There were 28 boys. The technique of management consisted of repeated aspirations until the effusions dried up. This was the only treatment necessary in 19 infants, 11 of whom recovered without sequelae.

In 13 infants the effusions failed to clear by this method, and in these a Holter shunt was put into the subdural space draining it into the right auricle. This was satisfactory in 10 infants, and the shunt could be subsequently removed, and 7 of these are normal. Removal of the membrane was only carried out in 7 infants. The indications were based on Ingraham and Matson's earlier observations, but retrospectively these seemed to be inadequate. No child benefited from such a procedure.

Altogether 19 survivors are physically and mentally normal. 4 are moderately handicapped, but 11 are severely handicapped, both intellectually and by physical sequelae. The physical sequelae consist of blindness, spasticity, and convulsions in almost all children. These gross handicaps were not due to the persistence of the subdural effusions, but to the associated brain drainage sustained at the same time as the injury causing the effusion.

Analysis of our data suggests that there is no longer adequate justification for removal of the membrane in subdural effusions, as the effusion frequently persists in spite of it, and less harrowing measures give better results.

HUGH R. BRODIE introduced by PROFESSOR J. P. M. TIZARD (London). 'Measles Vaccine.' Several strains of live measles virus vaccine have been developed, and these differ somewhat in both the immediate post-vaccinal effect on the patients, and the longer term immunological status which they confer. In the Western world the types generally employed are those developed from the original 'Edmonston' strain. These include Edmonston A and B, the further attenuated or 'Schwarz' strain and the various Beckenham strains which have been subcultured in England. The Soviet Union and The People's Republic in China have independently developed their own strains called Leningrad and Peking, which are widely but not universally employed in Public Health programmes in those countries.

Measles virus has been studied at McGill University since 1960. A double-blind trial of four different strains was carried out to study the differences in their clinical reactivity and antigenic properties over a three-year post-vaccinal period.

A. BENTOVIM introduced by PROFESSOR O. H. WOLFF (London). 'Controlled Observations of Phenylketonuric Children on and during Withdrawal from Low Phenylalanine Diet.' There is much controversy about the age when low phenylalanine diet can be withdrawn from PKU children. Marked changes in behaviour are reported with fluctuations in blood phenylalanine levels in PKU children. Systematic assessments were made of these and other parameters on and during controlled withdrawal of low phenylalanine diets from 8 children.

All 8 children (4 boys, 4 girls) had long periods on diet from 4.7 to 14.4 years (average 9.2 years), having started diet from birth (1 case) to 3 years (average 1.9 years). Diet was discontinued from age 6.6 to 16.8 years (average 10.11 years) for a number of reasons. Final intelligence quotient ranged from 40 to 90 (average 68). 3 attended normal school, 4 ESN school and 1 training centre; 2 were about to start work.

Parents were interviewed to obtain details of development and adjustment during the initial 2-4 week period as in-patients; strict dietary control was maintained with regular phenylalanine blood levels. Daily ratings of mood, aggressiveness, activity level, and general behaviour were reliably made by nurses, play-leaders, teachers, and psychiatrists. Psychological assessment and EEG in all were also performed.

During an experimental period of 2-5 weeks timed at random, additional protein was added to the regular diet so that patients and ward staff were unaware of the change.

On diet the behavioural pattern of the 6 younger children tended towards hyperactivity, poor concentration and attention span, excitability, and anxiousness. The two older girls were immature and shy. All children were overdependent, and family reactions of over-protection, anxiety, rejection, and limitation of family life appeared. Many problems appeared to revolve around the administration of an unpleasant and restrictive diet.

After introduction of protein there were general transient changes in previous behavioural tendencies. All children appeared either more aggressive, anxious, or active, but all reversed to previous levels of behaviour in time. Psychological, and EEG assessments also showed no significant change at the end of the period nor after 3-6 months (5 cases).

Follow-up is limited (3-12 months), and to date the most striking change when normal food was introduced finally has been increased emotional maturity, independence, and self-confidence, which followed in all children, and relaxation of general family tension.

Addition of protein to low phenylalanine diets under controlled conditions appears to be a satisfactory method of observing the changes which can be expected