general management of hypernatraemia in infancy was discussed.

K. A. LACEY introduced by J. M. Parkin. Newcastle. 'Community study of short stature'. This paper describes a total community study to determine the causes of short stature in childhood.

In the Newcastle study of child development, data have been collected prospectively from birth from all children born to Newcastle mothers in 1960, 1961, and 1962. Those children who were born in 1960 and whose heights at the age of 10 years were below the third centile were identified and brought to hospital for examination and investigation.

Of the 98 children seen, an organic explanation was present in 16. 13 of these had a gross and previously well-documented problem (e.g. Down's syndrome, cerebral palsy, congenital heart disease). A boy with renal failure had been diagnosed a few weeks before the study, and a girl with a chromosomal abnormality and one with probable growth hormone deficiency, were diagnosed as a result of the study. The remaining 82 were 'small normal' children and had either a family history of short stature, a delayed bone age, or both. In 50% of these there was a significant social problem. It is concluded that short stature is more commonly associated with adverse home circumstances than with organic disease.

CATHERINE S. PECKHAM (Sheila Sheppard and W. C. Marshall) introduced by J. A. Dudgeon, London, and R. W. Smithells, Leeds. 'Surveillance of congenital rubella defects'.

C. PAPADATOS. Hellenic Paediatric Society. 'Immunoglobulin levels in postmature newborns.' Premature termination of pregnancy together with pregnancies lasting longer than 42 weeks have always been recognized as important factors affecting fetal survival.

The present investigation was carried out with the object of studying immunoglobulin in different stages of postmaturity and comparing them to maternal levels.

Our material consisted of 91 newborns. Of these, 32 were term, unselected babies with a normal pregnancy and delivery, and 59 were consecutive postmature infants born after a gestation by history of 42 or more completed weeks.

Immunoglobulin levels were evaluated on the basis of 3 criteria. (1) Gestational age. With duration of pregnancy as basic factor, 32 newborns were considered term and 59 postmature. (2) Occurrence of histopathological placental abnormalities. In term pregnancies placentas were normal, while in postmature babies definite placental anomalies were noted. On the basis of this criterion, 33 babies were considered as term and 58 as postmature. (3) Clinically recognizable signs of postmaturity. Taking this factor into consideration, 39 newborns were considered as term and the 52 with obvious clinical signs as postmature.

Statistically significant differences were noted in immunoglobulin levels if postmaturity is judged on the

basis of duration of pregnancy, placental histopathology, or clinically obvious signs of postmaturity.

C. DACOU-VOUTETAKIS. Hellenic Paediatric Society. 'Screening for congenital hypothyroidism: a preliminary report.' No screening procedure has thus far been proposed for congenital hypothyroidism (CH), the most frequent metabolic abnormality with preventable mental retardation. The observation that the ossification centres at the knee appear at the 8th month of gestation and are usually absent in the 2- to 3-month-old infant with athyrotic cretinism prompted us to investigate the possibility of diagnosing CH by taking an x-ray of the knee shortly after birth. 1548 newborns, of birthweight >2800 g, were x-rayed. The newborn was covered with a leaf of lead and only a small window was left at one knee. The ossification centres were absent in 10 cases (0.65%) in which serum thyroxine was subsequently determined. None of these cases showed clinical or chemical evidence of hypothyroidism up to the age of 3 months. Our experience thus far may be summarized as follows. The procedure is easy to perform, inexpensive, safe, does not require special training, and the false positive results are low (0.65%). Further work is obviously needed to determine the percentage of false negative results, and also the final IQ of cases so detected.

A. M. ELSEED introduced by E. A. Shinebourne. London. 'Assessment of techniques for blood pressure measurement in infants and children.' In paediatric practice measurement of arterial pressure presents technical problems especially in obese infants, in patients with coarctation, or after arteriotomy. Palpation, auscultation, flush, and recently the Doppler shift technique have been used, but no controlled trial has compared these indirect methods with simultaneous intra-arterial recordings. We present the results of a double-blind controlled trial of 22 children aged 4 months to 11 years, where the indirect techniques were applied in a randomized order both by a doctor and a trained nurse, while a third observer recorded intra-arterial pressure. All patients had indwelling intra-arterial lines for routine postoperative management and pressures were recorded using a fluid-filled catheter-transducer system, amplitude response flat to 12 Hz. Nurses and doctors obtained similar readings. There was no significant difference between direct readings and pressures obtained by the Doppler technique, but the other techniques underestimated systolic pressure: auscultation 3.6 ± 7.6 mmHg (mean systolic difference $\pm$ SD) $P < 0.05$; palpation 10.9 ± 7.9 , $P < 0.001$; flush 40.1 ± 11.6 , $P < 0.001$. Flush pressure approximated to mean pressure. The Doppler technique was also assessed in situations where it was impossible to record systolic pressures by other indirect methods and was successfully used for lower limb pressures in 10 of 12 infants with coarctation, in 4 obese infants, and in 4 children after arteriotomy.

B. HARCOURT introduced by R. W. Smithells. Leeds. 'Detection and investigation of homonymous hemianopic