diagnostic criteria for coeliac disease. *Arch Dis Child* 1979; **54:** 783–6.
5 Walker-Smith JA, Guandalini S, Schmitz J, Shmerling DH, Visakorpi JK. Revised criteria for the diagnosis of coeliac disease. Report of a working group. *Arch Dis Child* 1990; **65:** 909–11.
6 Walker-Smith JA. Transient gluten intolerance. *Arch Dis Child* 1972; **47:** 155–8.
7 Walker-Smith JA. Transient gluten intolerance. Does it exist? *Neth J Med* 1987; **93:** 1356–62.
8 Polanco I, Larrauri J. Does transient gluten intolerance exist? Kumar PJ, Walker-Smith JA, eds. *Coeliac disease: 100 years.* Leeds: University Printing Service, 1989: 226–31.

Toledo type brachyolmia

EDITOR,—I read with interest the paper by Grain *et al* dealing with the first UK case of a type of brachyolmia (short trunk) which is associated with both peripheral corneal punctate opacities only seen by slit lamp and a qualitative abnormality of glycosaminoglycans (chondroitin sulphate).[1]

These data confirm our previous findings in four siblings with this autosomal recessive condition.[2 3] We agree with the authors' statement that these cases represent a distinct type of spondylar dysplasia. Natural history, physical examination, and ophthalmological, radiographic, and biochemical findings in the case reported by Grain *et al* coincide with those of our cases, except for two points. First, some of our cases had irregular chondrocostal ossification. Second, advanced bone age was not present in our cases and this may explain why final adult height in our male cases (3–10th centile) was not as short as the one predicted for the case reported by Grain *et al* (3rd centile).

As stated by the authors, this disease may be a currently unrecognised cause of short stature. We have suggested for the diagnosis of this brachyolmia, type I, that a slit lamp examination as well as detailed glycosaminoglycan studies should be performed as routine procedures.[4] The latter test is currently available only in some laboratories, but it is of crucial importance for the diagnosis of brachyolmia type I. As autosomal recessive and autosomal dominant patterns of inheritance are involved in the four types of brachyolmia,[1] the distinction among them will allow an adequate clinical management of the patients and will give further support for adequate genetic counselling.

Present efforts in this type of brachyolmia should be directed to DNA studies and among the candidate genes one should include those involved in glycosaminoglycan metabolism. Sequencing and cloning of the gene for brachyolmia would allow a more precise diagnosis and genetic counselling for this condition.

SERGIO TOLEDO
Endocrine Genetics Unit,
Department of Medicine,
University of São Paulo School of Medicine,
Av Dr Arnaldo 455,
5th r07-01246-903,
São Paulo, Brazil

1 Grain L, Duke O, Thompson G, Davies EG. Toledo type brachyolmia. *Arch Dis Child* 1994; **71:** 448–9.
2 Toledo SPA, Mourão PAS, Lamego G, *et al.* Recessively inherited, late onset spondylar dysplasia and peripheral corneal opacity with anomalies in urinary mucopolysaccharides: a possible error of chondroitin-6-sulfate synthesis. *Am J Med Genet* 1978; **2:** 385–95.
3 Mourão PAS, Toledo SPA, Nader HB, *et al.* Excretion of chondroitin sulfate C with low sulfate content by patients with generalyzed platyspondily (brachyolmia). *Biochem Med* 1973; **7:** 415–23.
4 Toledo SPA. Spondylar dysplasia/brachyolmia, type I: search for glycosaminoglycan disturbances. *Clin Genet* 1992; **42:** 213–4.

Acyclovir in chickenpox

EDITOR,—Virological evidence for the reactivation of chickenpox contracted in infancy has recently been documented and is related to the immune status of the host.[1] Secondary attacks of chickenpox and early reactivation as zoster have been reported after the treatment of normal children with chickenpox suggesting that the immune response may be impaired after acyclovir treatment.[2] We report the case of severe primary varicella infection in an infant who should have been protected by passive maternal antibody. His mother had been treated with acyclovir for chickenpox before delivery.

A 25 year old woman presented at 38 weeks' gestation with a vesicular rash. The diagnosis of chickenpox was confirmed by the detection of specific IgM antibodies to varicella zoster virus and she was treated with acyclovir 800 mg five times daily for seven days. Nine days after the development of the rash she delivered a healthy boy. Six days after delivery he developed a vesicular rash and fever, and varicella zoster virus was detected in vesicular fluid. He was successfully treated with a five day course of acyclovir (100 mg five times daily).

This infant was born nine days after his mother developed chickenpox and, in accordance with current guidelines for the UK, he did not receive zoster immune globulin.[3] We postulate that the use of acyclovir to treat the mother's infection may have affected her immune response to the virus leading to reduced passive transfer of immunity to her fetus. When he was born he was at increased risk of varicella infection, which he subsequently developed. This case highlights concerns over the effect of acyclovir on the immune response to chickenpox and also suggests that the present guidelines for passive immunisation against varicella zoster virus may leave a proportion of infants born to mothers treated with acyclovir at unnecessary risk.

PETER J JENKS
JUDITH BREUER
Department of Virology,
Royal Hospitals NHS Trust,
37 Ashfield Street,
London E1 1BB

1 Terada K, Kawano S, Hiraga Y, Morita T. Reactivation of chickenpox contracted in infancy. *Arch Dis Child* 1995; **73:** 162–3.
2 Duvic M, Grossman D. More on acyclovir for chickenpox. *N Engl J Med* 1994; **331:** 59.
3 Department of Health, Welsh Office, Scottish Office Home and Health Department, DHSS (Northern Ireland). Varicella/herpes zoster. *Immunisation against infectious disease.* London: HMSO, 1992: 155–9.

Expulsion of ventriculoperitoneal shunt tubing

EDITOR,—A baby girl of 18 months was admitted to our paediatric ward in September 1982 with a two week history of irritability, vomiting, and refusal to sleep. She had a fever of 38·5°C and a lumbar puncture showed cerebrospinal fluid protein of 3·65 g/l, 750 polymorphonuclear leucocytes$\times 10^6$/l of cerebrospinal fluid, and Gram positive cocci on staining.

A diagnosis of pneumococcal meningitis was made and the child was treated with triple chemotherapy: penicillin, sulphadimidine, and chloramphenicol as was routine in 1982. She remained critically unwell and developed a third and sixth nerve palsy on the left side. Computed tomography of the head showed marked dilatation of the lateral and third ventricles and she was referred to the neurosurgeons who subsequently inserted a ventriculoperitoneal shunt. The child recovered from her meningitis but remained globally retarded in her development with regular seizures and unable to speak.

At the age of 14 years, she represented with apparent, recurrent abdominal pain. Physical examination was unhelpful. There seemed to be no area of local tenderness or guarding. She continued to eat well and her bowels moved normally. Urine culture and analysis was negative and a plain abdominal radiograph failed to reveal any abnormality. The apparent abdominal pain that the child was suffering persisted intermittently for several weeks and she was reviewed and examined on several occasions. No clinical evidence of organic disease was elicited. After approximately eight weeks of intermittent symptoms the child passed a plastic tube in her stool which was clearly the distal portion of the ventriculoperitoneal shunt.

I am unaware of any reports of this particular complication of ventriculoperitoneal shunting.

I L SWANN
Department of Child Health,
Burnley General Hospital,
Casterton Avenue,
Burnley BB10 2PQ

Infant length measurements

EDITOR,—Like Professor Frank Falkner[1] I was interested to read Dr Doull's article on the reliability of infant length measurement,[2] though a little disappointed to find no reference to the Neonatometer – an instrument for measuring crown-heel length in infancy designed and written up by Bob Holding (from Holtain Ltd) and myself 24 years ago[3] in the *Archives*. This paper showed that, provided careful attention was given to the technique in the training of observers with the neonatometer, '95% of all observations of crown-heel length were likely to lie between plus and minus 3·4 mm of the true value'. These represented accurate and reliable measurements. The constant pressure pad fitted to the number counter, allowing it to automatically lock, added particular precision. We also showed that mothers were well able to hold the head.

But a good reliable instrument is one thing, it is quite another to convince people of the value of length measurement in infants. Along with weight and head circumference, length is important – not only for the more immediate assessment of growth status but also to help evaluate a problem of growth in an older child by looking back at earlier measurements.

D P DAVIES
Department of Child Health,
University of Wales College of Medicine,
Heath Park, Cardiff CF4 4XN

1 Falkner F. Infant length measurements. *Arch Dis Child* 1995; **73:** 379.
2 Doull IJM, McCaughey ES, Bailey BJR, Betts PR. Reliability of infant length measurement. *Arch Dis Child* 1995; **72:** 520–1.
3 Davies DP, Holding RE. Neonatometer: a new infant length measure. *Arch Dis Child* 1972; **47:** 938–40.