

PostScript

LETTERS

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Munchausen syndrome involving pets by proxies

In a letter in 1998 we drew attention to the fact that there was no reference to Munchausen syndrome by proxy described in the veterinary literature.¹ Recently Munro and Thrusfield from the Royal School of Veterinary Studies, University of Edinburgh have published a paper in the *Journal of Small Animal Practice*, documenting the first series of reports of suspected Munchausen syndrome by proxy involving pets as proxies.² In the study, 1000 randomly selected veterinary surgeons received a questionnaire specifically asking for details of their perceptions and experience of non-accidental injury in animals. A total of 448 cases were described, six of which were described by the respondents as possible Munchausen syndrome by proxy. Three other cases were identified by the authors as possible Munchausen syndrome by proxy. The nine cases are all described and show similarity to child proxy incidents. Common features include frequent requests for clinical review (up to four times in one day in one case), and frequent change of veterinarian ("veterinarian shopping"). In some cases the mode of clinical presentation was similar to that seen in paediatric practice, for example, presentation with haematuria or uncontrolled fitting. In one case a dog owner was insistent that a neighbour had poisoned his dog, but he was later convicted for the attempted poisoning of his child; in court it was revealed that he had previously attempted to poison two other pets

treated by other veterinarians. In another case a cat owner gave an incoherent history with regard to the cause of injuries, and postoperative trauma occurred to the intramedullary pin. Repeated problems arose until the cat was admitted.

The authors conclude that their findings should not only inform the small animal practitioner about a curious syndrome but also form the basis of broader debate in comparison between the experience of the veterinary and medical professions. Communication between child protection agencies, veterinary surgeons, and the RSPCA is beginning to occur in different parts of the country. Such liaison should be welcomed by paediatricians.

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1 **Finlay F**, Guiton S. Munchausen syndrome by proxy. Abuse perpetrated by men. *Arch Dis Child* 1998;**79**:466.

2 **Munro HMC**, Thrusfield MV. "Battered pets": Munchausen syndrome by proxy (facititious illness by proxy). *Journal of Small Animal Practice* 2001;**42**:385–9.

The prevalence of rickets among non-Caucasian children

We welcome the timely review by Shaw and Pal¹ on the continuing problem of vitamin D deficiency among South East Asians living in the UK. Since our report in 1999,² we have continued to see 8–10 non-white toddlers with florid vitamin D deficiency rickets per year, at our inner city general paediatric unit. A recent national survey showed that 20–34% of South East Asian children had biochemical evidence of vitamin D deficiency.³ However, there is no information on the prevalence of clinical rickets among non-Caucasian children in the UK.

We opportunistically studied 6–36 month old children from ethnic minority backgrounds who were brought to a child health clinic in Central Manchester between 30 May 2001 and 12 July 2001 for immunisations, weight checks, hearing tests, and developmental assessments. A structured question-

naire was used to determine if the children were receiving vitamin D supplements and whether they had been prescribed by health professionals or bought "over the counter" by the parents. Arms and legs of children were examined for deformities and swelling of the metaphyses due to rickets. Children with clinical stigmata of rickets had an x ray of their left wrist and estimation of serum calcium, phosphorus, alkaline phosphatase (ALP), parathyroid hormone (PTH), 25-hydroxyvitamin D (25OHD), and 1,25-dihydroxyvitamin D (1,25(OH)₂D). Ethnicity was self determined by parents as South East Asian (Pakistani, Bangladeshi, or Indian), African, Afro-Caribbean, and Middle Eastern origin. The study was approved by the Central Manchester Research Ethics Committee.

A total of 124 children (mean age 15.4 (8.2) months) were studied. Seventy seven per cent of children were of South East Asian origin and almost 50% were of Pakistani origin. Thirty (24%) children were receiving vitamin supplements; in 13 (43%) multivitamin preparations had been bought "over the counter" by the parents. Three children had clinical stigmata of rickets. Table 1 shows biochemical results. Two (1.6%) of these had radiological features of moderately severe rickets (fig 1) and the third had metaphyseal sclerosis, indicating healed rickets. One child was noted to be pale; his haemoglobin was 62 g/l (normal >110 g/l).

The Department of Health's Committee on Medical Aspects of Food Policy (COMA) recommends vitamin D supplements for all children up to 3 years, and up to 5 years in those at high risk of developing vitamin D deficiency.⁴ It was therefore disappointing that less than a quarter of the subjects studied were receiving vitamin D supplements. Two children (cases 1 and 2) were found to have clinical and radiological evidence of active rickets. As shown in table 1, they also had biochemical features of rickets with elevated serum ALP activity for age, low serum 25OHD (a measure of an individual's vitamin D status), and secondary hyperparathyroidism. All three had been breast fed for periods ranging between four and nine months after birth and none had been prescribed vitamin D supplements.

According to the 1991 census data there were approximately 4000, 6–12 month old children of ethnic minority background resident in the city of Manchester. We found that 1.6% of the children examined had rickets. If this figure were extrapolated to all 6–36

Table 1 Ethnic origin, age, and biochemical results in three children with clinical stigmata of rickets

Case no.	Ethnic origin	Age (months)	Calcium (mmol/l) (2.15–2.6)	Phosphorous (mmol/l) (1.3–2.5)	Alkaline phosphatase (IU/l) (230–700)	Parathyroid hormone (pg/ml) (10–60)	25(OH)D (ng/ml) (5–30)*	1,25(OH)D (pg/ml) (20–50)
1	Pakistani	15	2.3	1.5	1859	192	10	103
2	Pakistani†	8	2.4	1.4	1377	288	16	Insufficient sample
3	Pakistani	9	2.5	1.6	697	48	13	145

The normal ranges for biochemical variables are shown in parentheses.

Cases 1 and 2 had radiological features of rickets; a radiograph of case 1 is shown in fig 1.

*Serum 25OHD levels <5 ng/ml are found in severe rickets, whereas levels <12 ng/l are considered to be deficient.

†Parents of this child has started him on an "over the counter" purchased multivitamin preparation between being seen in the child health clinic and venepuncture, 10 days later.



Figure 1 Radiograph of the wrist (case 1, table 1), showing wideing, cupping, and fraying of the distal radius and ulna.

month old non-Caucasian children living in the Manchester area, we estimate that there would be approximately 60 children with rickets at the time of this study. Rickets is not a historical disease, as it seems to be perceived by many health professionals. However, it is an entirely preventable by use of vitamin D supplements as recommended by the COMA.⁴ We wholeheartedly agree with Shaw and Pal¹ that a nationwide campaign, similar to the "Stop Rickets" campaign in the 1980s is needed to tackle this problem.

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Paediatricians' misconceptions on childhood immunisations

Suboptimal immunisation practices of health care providers, mainly overly cautious interpretation of vaccine contraindications, result in missed opportunities for immunisation.¹ In an attempt to identify deficiencies and misconceptions in the knowledge on childhood immunisations of community and hospital based paediatricians, with the purpose to plan appropriate teaching sessions, a quiz was developed from the common questions that I, as District Immunisation Coordinator,² was asked. It was presented as short case studies, each having a number of

answers to be marked as true or false, and validated by reference to *Immunisations against infectious disease*³ and current UK immunisation guidelines. The quiz was handed out before the training sessions on childhood immunisations in two districts and in the regional training session for "core" specialist registrars in paediatrics (first and second year).

Twenty four of 35 (69%) participants were junior doctors and 11 (31%) career paediatricians (staff grade, associate specialists, and consultants). Fifteen (43%) had more than four years experience in paediatrics. The sample of paediatricians was representative of the team of career and training paediatricians in district hospital and community paediatric departments. The percentage of correct answers per participant varied between 36% and 92% (mean 70.66%). The results showed that paediatricians, both career and in training, had a number of misconceptions about contraindications of childhood immunisations. The most problematic area was the advice given after local and generalised reaction following DTP/Hib combined in one injection. In addition there was marked overestimation of a mild to moderately severe local reaction as severe, regarded as contraindication to immunise. Those with longer experience in paediatrics did not have less misconceptions, suggesting that all paediatricians require in depth discussion and regular update of the childhood immunisation schedule, contraindications to immunise, and how to manage missed immunisations.

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BOOK REVIEWS

Overgrowth Syndromes

Edited by M Cohen, G Neri, and R Weksberg. USA: Oxford University Press, 2001, \$85.00, pp 224. ISBN 0195117468

Paediatricians are often more concerned about failure to grow rather than excessive growth. Bigger is not always better, however, and this relatively slim volume provides a wealth of information about almost all of the recognised overgrowth syndromes. Edited by some of the world's experts on growth disorders, the focus is on multiple anomaly syndromes which have generalised or partial overgrowth as a feature. Although many of the conditions are rare some, such as Fragile X syndrome and neurofibromatosis, are common enough for this book to be of relevance to the generalist as well as the specialist. Along with details of conditions such as Sotos syndrome and Beckwith-Wiedemann syndrome there is information on many newly delineated overgrowth syndromes, reflecting the increased interest in overgrowth and the mechanisms giving rise to it over the past few years.



The format of this book and layout of the information within the chapters is traditional. Each chapter provides comprehensive coverage of a specific syndrome, including the clinical aspects, differential diagnoses and aetiology where known. The topics are well referenced and accompanied by many good quality, if rather dated, black and white illustrations. There are in addition chapters on chromosomal overgrowth syndromes, endocrine causes of overgrowth, and non-syndromic overgrowth, although the latter is rather brief and disappointing. An introductory chapter has fascinating historical facts about overgrowth and the way it features in ancient mythology. Some tales are hard to swallow, such as the birth of the mythical giant Gargantua through his mother's ear! A later discussion confirms that the "Elephant Man", Joseph Merrick had the condition of Proteus syndrome and not, as was originally thought, neurofibromatosis.

I found this book to be a very interesting read, and a superb source of references. The tables of clinical features in each chapter are also useful check lists when considering syndromic diagnoses. The molecular genetic information is reasonably up to date although it is unfortunate for the editors that one of the great mysteries of overgrowth, the cause of Sotos syndrome, was discovered just after this book was published. I am not so sure that this book would be the first choice of general paediatricians if their budget were limited, as even though the authors have provided clear explanations of many of the genetic mechanisms involved, some readers would find the more complicated genetic explanations containing a lot of molecular genetic jargon hard going. The book would also be of more relevance to those caring for children with overgrowth disorders on a day to day basis if there was more information on the general management of overgrowth syndromes. Although the issue of increased risk of neoplasia in overgrowth syndromes is raised, for example, there is no general guidance on screening affected children for tumours in childhood.

Despite these criticisms, I am sure that all paediatricians would enjoy delving into this book as they could not fail to find something of interest within its pages. From the point of view of the clinical geneticist or growth specialist the book provides a good overall review of overgrowth syndromes and will be a useful resource.

J Clayton-Smith

Handbook of Paediatric Intensive Care

G Pearson. London: WB Saunders, 2002, pp 336. ISBN 0 7020 2346 9

George Bernard Shaw said "we have not lost faith, but we have transferred it from God to the medical profession." Paediatric intensive care was born from the increasing technology and sophistication expected from medicine and is still a new and evolving speciality. A very small number of children will have the

misfortune to need to be treated in a paediatric intensive care unit (PICU). It's an expensive business and often a very emotional one; but very real paediatrics. There are few PICUs in the UK and only six centres that are fully recognised for formal PICU training. Trainees may feel that mercifully few of them will rotate through PICUs as part of their training and that perhaps a book like this might not be for them. If that describes you I would encourage you to think again. Most PICUs are staffed with juniors who are paediatricians in training. Even if they decide that other areas in paediatrics interest them more, I believe most find their time in PICU valuable, varied and exciting. You won't forget it. You won't regret it. This book might suit you and there are not that many like it in the bookshops.

Gale Pearson is undoubtedly well qualified to write this book as clinical director in one of the largest units in the UK. Some of his passion for the subject comes through the text even when discussing "developing a Bayesian approach to PICU". In a slim textbook a great breadth of the subject is covered including respiratory physiology, audit, congenital heart disease, and nutrition for example. Despite the breadth this book appears to me to have some depth and may be less of a handbook and more of an introductory textbook to PICU. There are valuable management suggestions and algorithms but much of the book is carefully selected background to the problems encountered in clinical practice and

requires time to read and take it in. From a personal point of view there were a few areas that perhaps needed more coverage. If the intention was a bias to include common causes of admission to PICU, I think bronchiolitis deserved more than the 10 lines it got but maybe that's my bias.

The book ends with a concise but detailed chapter: "Issues surrounding death on the PICU". Public expectation is very high. Despite the public's faith we are not the deities they see on the television and certainly not as good looking (not in the units I've worked in). We do our best—sometimes we fail. Samuel Beckett said: "Ever tried. Ever failed. No matter. Try Again. Fail again. Fail better."

R O'Donnell

Practical Endocrinology and Diabetes in Children

JE Raine, MDC Donaldson, JW Gregory, MO Savage. Oxford: Blackwell Science, 2001, pp 201. ISBN 0632051612

This concise textbook has proved extremely useful in general paediatric ward and clinic work. Problem based chapters give an overview of the relevant physiology and a practical guide to examination, investigation, and management of a broad range of childhood endocrine disorders. Each chapter includes an

interesting reference to controversial points in each field, future developments and example case history problems. There is also guidance on when to involve a specialist centre.

The authors have achieved consistency in the depth and approach of all chapters. The layout is modern, clear, and well illustrated which makes the book extremely readable.

The more unusual clinical problems such as intersex are included with remarkable depth and clarity for such a short text. The chapters on the common problems have been well thought out to cover practical questions. For example, the guidance on management of diabetes includes problems of long haul travel, surgery, alcohol use, and contraception in addition to practical aspects of ketoacidosis and cerebral oedema treatment.

The management guidance points are not individually referenced for level of evidence but represent established current practice. General references and key papers are given at the end of each chapter. Appendices list UK patient support group contacts and several growth charts, although height velocity and decimal age charts are not included.

The book is aimed at paediatricians in training and general paediatricians. In my department the book has also been used by nursing staff and doctors training in adult endocrinology. The authors achieve the difficult task of providing a text that is a good preparation for examinations in addition to a practical day-to-day guide. I would recommend the book to all candidates.

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Scimitar syndrome as a differential diagnosis in a child with recurrent wheeze

Respiratory symptoms of cough, wheeze, and breathlessness account for 40% of referrals to a general paediatric clinic. The majority of these children suffer from "wheeze secondary to upper respiratory tract infection" and "asthma".

A 7 year old girl was referred by her general practitioner to the clinic with a two month history of persistent cough and recurrent wheeze; she had been treated for suspected asthma with fluticasone and salbutamol since early childhood. There was a history of infantile eczema. She was growing well on the 50th centile. General examination was normal. There was no cyanosis or clubbing. Respiratory and cardiovascular system examinations were unremarkable.

She had been admitted at the age of 14 months with cough and wheeze; chest x ray showed right lower lobe consolidation which improved on antibiotics. Both radiographs were studied and the pattern of curvilinear density (scimitar) in the right lower zone suggestive of scimitar syndrome was recognised. She was referred to the paediatric cardiology department for echocardiography, which showed dilated right atrium, right ventricle, and a branch of the right pulmonary vein draining into the inferior vena cava, a mild variant of scimitar syndrome.

A cardiac catheterisation and coil embolisation of the systemic pulmonary collateral from the descending aorta to the right lower lobe is scheduled.

Scimitar syndrome is a name given to the triad of: (1) curvilinear vascular density in the right lower zone; (2) hypoplastic right lung; and (3) dextroposition of the heart. It has a wide spectrum of presentation and may sometimes only present in adulthood with symptoms of wheeze, recurrent chest infections, or pulmonary hypertension.¹

It remains a notoriously difficult diagnosis to make without a strong index of suspicion. In this case, pattern recognition on chest radiograph helped us to suspect the diagnosis. Examination and ECG may be entirely normal or just show right sided strain. Echocardiogram may also be normal or show dilated

right sided chambers (as in this case). Diagnosis can be missed in up to 33% cases by echocardiography.² More sensitive tests would include computed tomography scan, cardiac catheterisation, and magnetic resonance imaging with 3D MRA.^{3,4} Obstructive and early symptomatic types will usually need corrective surgery after stabilisation.⁵ Milder scimitar variant will probably do well with occlusion of the collateral supply.⁵

We have presented this case to highlight the fact that one has to keep an open mind regarding the final diagnosis in any child with recurrent wheeze, as all wheezes are not "asthma".

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Assessment of acute admissions by middle grade trainees and consultants will reduce the need for overnight hospital admissions

We carried out an audit to assess the impact on hospital admissions of patients being assessed by either middle grade trainees (residents) or consultants in a district general hospital (DGH). Our aims were to establish:

- Number of children kept in hospital overnight and those discharged the same day
- Number of readmissions of those discharged the same day
- Any adverse events in those discharged home the same day.

We studied retrospectively all acute admissions to the children's wards at Doncaster Royal Infirmary, a medium sized district general hospital, over the months of January and July 1998. We excluded all surgical and non-acute admissions. At the time of the study the Children's Hospital did not have a day or acute assessment unit. Therefore the children were reviewed following admission to the wards. Whether trainees or consultants reviewed patients was an entirely random process, dependent on willingness and time to carry out ward rounds in late afternoon or early evening. The review could also be triggered by nursing staff or parents. The interval between the time of admission to the ward and the time the patients were reviewed varied from immediate review to a few hours. The decision to discharge children was usually taken jointly by medical and nursing staff, provided that parents were willing to look after their children at home. The parents of children discharged home on the same day as admission were given open access to the children's ward—that is, they could either telephone the ward for advice or return with the child if concerned.

A total of 512 sets of case notes were reviewed by MMM and RAS. A pro forma was used to collect the data, which was stored on an Excel spreadsheet.

A total of 173 (34%) patients were under 1 year, 150 (29%) were 1–2 years, 53 (10%) were 3–4 years, 41 (8%) were 5–6 years, and 95 (18%) were over 6 years (fig 1). The source of referral was documented in 499 case notes. Of these, 287 (58%) were via a general practitioner, 178 (36%) were via the accident and emergency department, and 29 were from other sources. The commonest reason for admission was breathing difficulties followed by fever.

Of the 512 patients admitted, 260 (51%) were reviewed by middle grade trainees or consultants. Of those reviewed, 109 (42%)

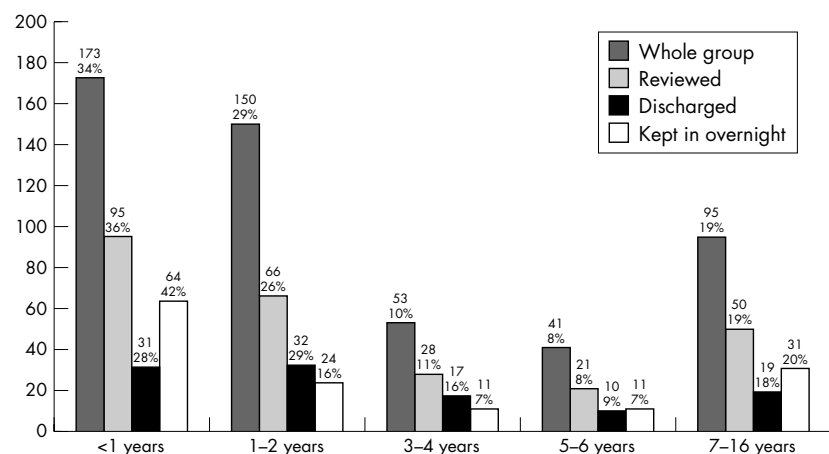


Figure 1 Breakdown of age groups.

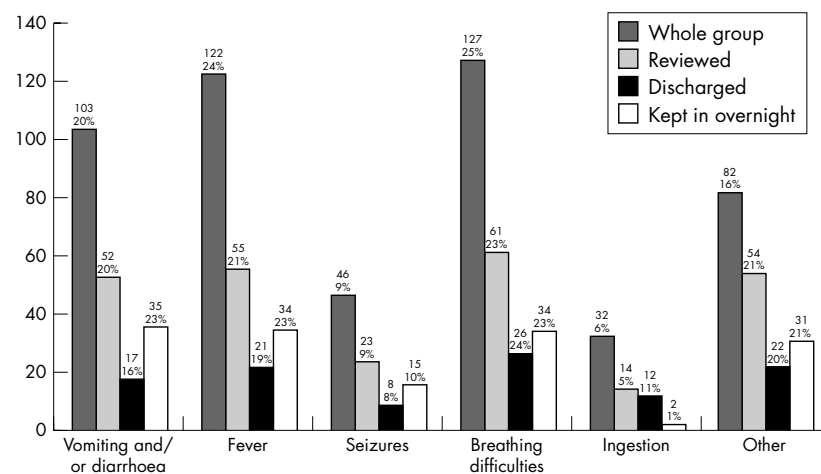


Figure 2 Reason for admission.

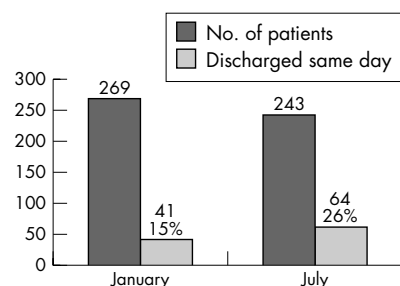


Figure 3 Number of patients discharged.

were discharged home the same day. The age group distribution (fig 1) and reason for admission (fig 2) of those reviewed was similar to that of the total sample. More children under 1 year were kept in overnight than were discharged home the same day; the reverse was true for those in the 1–2 year and 3–4 year age groups. The reason for admission of those discharged home the same day was also similar to that of the total sample. Slightly more patients were admitted in January than in July, but more patients were discharged home the same day in July than in January (26% v 15%; fig 3). This could well be due to the fact that there is more pressure on beds in the winter months. However, it could also be due to a different spectrum and severity of diseases.

Of those discharged home the same day, seven (6%) were readmitted within seven days, four because of the same complaint and three with a different complaint. There were no adverse events. Those who were reviewed but kept in overnight had a similar distribution of the reason for admission to that of the total sample and those who were reviewed but with an excess of vomiting and/or diarrhoea.

In conclusion, assessing the need for admission resulted in 20% of all admissions (40% of those reviewed) being discharged home the same day. Vomiting and/or diarrhoea were more likely to result in patients being kept in overnight. We believe the number of patients who can be discharged home the same day will be much higher if all acute admissions are reviewed and assessed in the way described. This policy seems safe and acceptable to parents.

With the planned reduction in the number of specialist registrars, it seems that expanding the number of consultants would achieve

the dual benefit of moving closer towards a consultant provided service and will also lead to reduction in the number of children requiring an overnight hospital admission.

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Parkinson-like syndrome as the major presenting symptom of Epstein-Barr virus encephalitis

The main symptoms of Epstein-Barr virus encephalitis (EBV) encephalitis are fever, seizure, bizarre behaviour, headache, and metamorphosis.¹ Bradykinesia, akathisia, involuntary hand movements, drooling, and torticollis are symptoms of Parkinson-like syndrome, which has never been described as a manifestation of EBV encephalitis. We report the case of a previously healthy boy who presented with Parkinson-like syndrome as the major symptom of EBV encephalitis.

A 12 year old, previously healthy boy was referred to our hospital because of severe cough with sputum and intermittent fever for seven days. Abdominal discomfort and vomiting were also noted one day before admission. On admission, his consciousness was clear with no focal neurological sign, no hepatosplenomegaly, no lymphadenopathy, and no exudative tonsillitis or skin rash. There was no

previous personal or family history of seizure disorder or migraine, and both the boy and his family denied being exposed to some possible hallucinogenic or neuroleptic drug. Blood analysis was normal except for a mild leucocytosis with a left shift (10 500/mm³; 84.6% neutrophils), and there were no atypical lymphocytes. C reactive protein (CRP) level was 0.17 mg/dl (normal <0.3 mg/dl).

After admission, mucolytic agents and bronchodilators were prescribed. Fever, abdominal discomfort, and vomiting subsided soon. Twenty four hours after admission, his condition deteriorated with drowsiness, involuntary rhythmic finger tapping movement, resting tremor, bradykinesia, photophobia, and staring eyes. But perceptual distortion was not noted. Cerebrospinal fluid (CSF) examination yielded yellow, clear fluid and normal opening pressure without microorganisms on Gram stain or culture. The cell count, protein, and sugar of CSF were all within normal limits. Table 1 lists laboratory evaluations for EBV and other possible pathogens of encephalitis. Brain magnetic resonance imaging (MRI) showed no abnormalities. Tc-99m HMPAO brain SPECT (Tc-99m hexamethylpropyleneamine oxime single photon emission tomography) showed diminished perfusion in the region of the right caudate nucleus. Electroencephalography (EEG) revealed diffuse slowing of background activity. His signs and symptoms showed gradual improvement under close observation in the following three weeks. He was then discharged in a stable condition. Follow up four months later showed no residual neurological sequelae.

Parkinson-like syndrome (extrapyramidal symptoms) is characterised by various neurological symptoms including akathisia, bradykinesia, torticollis, drooling, and involuntary hand movement. This syndrome develops in at least a quarter of children treated with neuroleptics due to disruption of the balance between the dopaminergic system and the cholinergic system within the basal ganglia. But Parkinson-like syndrome has also been recognised as a sequela of acute viral encephalitis, including coxsackie B, cytomegalovirus, measles, herpes simplex virus, Japanese B encephalitis virus, and encephalitis lethargica. *Mycoplasma pneumoniae* infection has also been recognised as a cause of Parkinson-like syndrome.² In our patient, exposure to possible hallucinogenic or neuroleptic drugs was denied. Serological tests and culture for other possible pathogens were negative. EBV encephalitis was diagnosed by serological and CSF polymerase chain reaction findings which fulfilled the diagnostic criteria.

EBV encephalitis is generally considered to be a benign, self limited disease associated with few sequelae. However, an incidence of

Table 1 Serological evidence for EBV encephalitis

	Day 1	Day 14
EBV VCA-IgM	1/32 (positive)	
EBV VCA-IgG	1/160	1/640
EBV determined nuclear antigens	Negative	
EBV CSF PCR	Positive	
<i>Mycoplasma pneumoniae</i> IgM	<1/40	<1/40
Culture for enterovirus	Negative	Negative
Coxsackie B virus IgM	Negative	
Cytomegalovirus IgM	Negative	
Herpes simplex IgG and IgM	Negative	
JBE virus IgM	Negative	

neurological sequelae after EBV encephalitis as high as 36% was reported by Domachowski and colleagues.³ The present case, therefore, not only draws attention to the role of EBV in infectious neurological disorders, but also suggests that an EBV aetiology should be considered in cases of Parkinson-like syndrome in childhood.

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Hyperextension of spine: unusual presentation of Guillain-Barré syndrome

Guillain-Barré syndrome (GBS) classically presents as ascending symmetric areflexic weakness with positive sensory symptoms. Recently, we managed a child presenting with unusual posture and hyperextension of the whole spine.

A 9 year boy presented with inability to hold books and write, and a limp. Over 12 hours he had developed tingling sensations and pain in the calf muscles; pain progressed to involve the neck and back by 24 hours and he was unable to flex his neck and extend his limbs. During the next two days weakness increased, especially of the lower limbs. By day 4, he had developed hyperextension of the cervical and thoracolumbar spine with flexed and adducted limbs. On day 6 when he

presented to us, vital signs including blood pressure were normal and remained so during the hospital stay. He had painful restriction of passive extension at all joints; motor power and tone could not therefore be assessed. He had bilateral symmetrical weakness: shoulders (abductor, adductor, 2/5), elbows (flexor 3/5, extensor 2/5), wrists (dorsiflexor, palmar-flexor, 2/5), finger flexors (2/5), hand grip (20–30%), hip flexors (2/5), knees (flexor, extensors, 2/5), ankle (0/5), toes (0/5). Deep tendon reflexes were absent except for the biceps, which also disappeared by day 12. Cremasteric and abdominal reflexes were present; plantars were absent bilaterally. The spine was normal except for hyperextension of the cervical and thoracolumbar region. Respiratory muscles, higher mental functions, speech, cranial nerves, and bowel and bladder functions were normal. A plain radiograph of the spine showed mild thoracic lordosis. Cerebrospinal fluid examination on day 11 showed high protein (95 mg/dl). On day 12, spinal hyperextension and abnormal limb postures disappeared following improvement in pain as a result of analgesic therapy. Kernig's and Brudzinski's signs could be elicited. Lasegue's sign¹ and the straight leg raising test were also positive. Symmetrical hypotonia became obvious.

GBS was suspected in view of progressive bilateral symmetrical weakness, severe radiculopathy, and albumino-cytological dissociation.² Nerve conduction studies, performed on day 23, showed reduced nerve conduction velocity in the motor nerves. Sensory nerves were normal. We could not determine F wave conduction velocity. The pain and tenderness subsided gradually. With regular physiotherapy the neck became soft, motor power improved, and he was able to sit unsupported by day 20. Four months later, neurological examination was normal. A stool culture for poliovirus was negative.

Children with GBS frequently have pain in the back and lower limbs, which is aggravated on the straight leg raising test in most of them.³ These pain syndromes are attributable

to radiculitis,⁴ an early and predominant feature in GBS.³ Prominent radiculitis in this case might have led to severe pain in the back, causing generalised paravertebral muscle spasm. This resulted in the unusual posture of hyperextension of the spine.

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CORRECTIONS

An error occurred in the letter by S Ashraf and M Z Mughal in the September issue (*Arch Dis Child* 2002;**87**:263–4). In the fifth paragraph, the first sentence should read "According to the 1991 census data there were approximately 4000, 6–36 month old children of ethnic minority background resident in the city of Manchester." The journal apologises for the error.

The photograph of children in the Morigata area in Delhi on the cover of the August issue was taken by the American photographer Mark Duerksen of Dallas, Texas.