CORRESPONDENCE

- *All letters must be typed with double spacing and signed by all authors.*
- *No letter should be more than 400 words.*
- *For letters on scientific subjects we normally reserve our correspondence columns for those relating to issues discussed recently (within six weeks) in the BMJ.*
- *We do not routinely acknowledge letters. Please send a stamped addressed envelope if you would like an acknowledgment.*
- *Because we receive many more letters than we can publish we may shorten those we do print, particularly when we receive several on the same subject.*

Motorcycle messenger mania

SIR,—Further to the Minister of Transport's recent launch of a scheme to provide suitable training for motorcycle couriers, you may be interested to note that the accident and emergency department of St Bartholomew's Hospital has been investigating the increase in injuries resulting from this type of service. We questioned all 33 motorcycle messengers attending the department over nine months. The results are summarised in the table.

Seventy per cent of the couriers who attended the accident and emergency department had had an accident in the past year and they had been riding that particular machine for an average of only 9·2 months.

Details of riders attending St Bartholomew's Hospital accident and emergency department

	Average	Range
Age of rider (years)	22·3	17-27
Power of motorcycle (cc)	403	125-1000
Riding experience (months)	49·1	3-144
Riding that particular machine (months)	9·2	2 days-36 months
Previous accidents per rider per year	0·7	0-4
Days off work due to accidents in past year	2	0-20
Expected days off work after this injury	14	0-90

The mean cubic capacity of newly registered motorcycles and mopeds in 1986 was 199·2 cc with 82% of these vehicles being below 400 cc (personal communication, Motor Cycle Association). This compares with an average of 403 cc among the injured motorcycle couriers, indicating that these couriers use particularly powerful machines. High acceleration does not appear to be necessary for the job but unfortunately the method of payment is in most cases "by the job" or by the distance travelled. This piecework would suggest that the inexperienced rider would be tempted to drive faster and take more risks.

In London 550 companies are listed as providing couriers but no records exist on the number of riders concerned. There is no legislation to force companies to ensure that their employees have insurance, road tax, or roadworthy vehicles. Furthermore, few keep accurate staff records.

Although the scheme launched last month is a voluntary code of conduct for couriers, it is hoped that more courier companies will appreciate the need for such a scheme. At present only 15 of the 550 companies have expressed an interest.

Clearly only a small proportion of accidents affecting couriers have been studied. Ten accident units serve central London, and data are currently being collected from them. The figures shown in our table highlight the prevalence of such accidents, representing considerable morbidity. Fortunately, there have been no recorded deaths yet, but one cycle dispatch rider was killed two months ago in central London (personal communication, City of London coroner). Accident prevention is clearly a role in which the medical fraternity must be actively concerned, especially as this affects an already vulnerable group of road users.

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Gender reassignment today

SIR,—I can understand Mr Grant Williams's reservations about gender reassignment when he

sees urgent surgical problems deferred for what he regards as less important a problem (21 November, p 1348).

In my practice I have had three patients who were transsexual, one female to male and two male to female. All were profoundly unhappy misfits, and one of the men had been labelled psychopathic. I have lost contact with the female to male patient, but since gender reassignment both the male to female patients have become integrated useful members of society and all their previous psychological problems seem to have disappeared.

Their misery as transsexuals is quite as great as that of patients requiring vasovasostomies, although it might seem to us to be more bizarre.

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SIR,—I agree completely with Mr Grant Williams's view that "to pursue gender reassignment surgery in the current climate must be bottom of the list of medical importance." However, he weakens his argument considerably by mentioning the need to do vasovasostomies for the reversal of vasectomy. This operation must be next to the bottom of medical importance. Should we not remember the *Concise Oxford Dictionary*'s definition of medicine as "the art of restoring and preserving health" and restrict surgery to that aim while resources remain scarce?

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SIR,—The correspondence after my leading article (22 August, p 454) requires summary. Mr Grant Williams would place gender reassignment surgery at "the bottom of the list of medical importance" and possibly abandon it altogether in view of the current pressures on the health service. His view will certainly attract support, especially from those who do not know the strange suffering of transsexual people and the improvement in the quality of their lives that can follow a carefully supervised gender reassignment programme. Mr Williams points out that members of the division of surgery at Charing Cross Hospital oppose the continuation of gender reassignment operations, and this is understandable since this one hospital has undertaken the major proportion of this work for the whole of Britain. This unfair burden should be corrected, as I pointed out, by the establishment of regional services.

Mr Williams is unfair in his criticism of the outcome studies conducted by the psychiatry team at Charing Cross Hospital for it carried out the study in a reasonable way. It would not be possible to randomise patients to a surgical and a non-surgical group since the decision to refer for surgical reassignment is a late event in a long period of contact, which includes other treatment procedures. This is not to say that outcome studies cannot be improved; they can, and they must, if psychiatrists are to continue to persuade their surgical colleagues that such a complex intervention is justified. The idea of independent assessment which I put forward should be considered, and we have in fact just completed such an assessment in our small series in Leeds.

Mr Williams is correct in saying that surgical reassignment does not always improve the quality of life and that suicide may occur. When this happens it is probably because staff have allowed reassignment to occur at too urgent a pace and the patient has not adapted to the new gender role before surgery is undertaken. A major task of the psychiatrist is to resist importunate pressure from unsuitable applicants. This is also a point in favour of continuing reassignment on the NHS. Those who have the money to "buy" their reassignment may dictate the pace, often to their own detriment.

I hope that gender reassignment can continue by carefully trained teams. The team at Charing Cross Hospital, and those whose decisions have enabled them to continue their work, should deserve the respect due to their commitment and they should not be pilloried or accused of carrying out trivial procedures at the public expense.

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**This correspondence is now closed.—ED, *BMJ*.

Child abuse and osteogenesis imperfecta

SIR,—We welcome Dr L S Taitz's timely reminder of the fact that osteogenesis imperfecta causes unexplained fractures in early childhood and can be mistaken for non-accidental injury (31 October, p 1083).

We hold a register of clinical details of 874 patients with osteogenesis imperfecta, of whom 773 live in the United Kingdom. All but 51 of these have been classified according to the Sillence scheme.[1] Types I and IV are mild or moderately severe cases, dominantly inherited, or arising as a new mutation. People with types IA and IB have classical blue sclerae throughout life, whereas those with types IVA and IVB have normal sclerae in adult life but often pale blue sclerae in early childhood.[2] Those with types IB and IVB have overt dentinogenesis imperfecta. Type II is very severe and causes stillbirth or early neonatal death; this group is identified by us in only the very few patients who survive the neonatal period. Patients with type III disease usually have fractures at birth and progressive deformity thereafter.

The table shows the figures for the 773 patients in the United Kingdom in whom the diagnosis is not now in doubt. In more than 10% of cases the parents had to contend with accusations of child abuse at the time of the first few fractures, and in 13 cases formal case conferences or care proceedings were arranged. In the worst case a child was in care for three and a half years before the diagnosis of osteogenesis imperfecta was accepted.

Can such inappropriate and damaging care be prevented? In known cases of osteogenesis imperfecta parents should be provided with a suitable letter to show to casualty staff. The real difficulty arises in patients with type IVA osteogenesis imperfecta with normal or near normal sclerae, normal teeth, and usually normal radiographic appearances at the time of the first fracture.[2,3] In 30% of cases (55% of patients born after 1970) parents had to face allegations of non-accidental injury.

In the type IVA disease a family history may be helpful, and apparently minor signs, particularly joint flexibility, may be important. New dominant mutation is, however, well recognised.[4] Wormian bones, if present, are helpful, but it is not true that their absence excludes osteogenesis imperfecta. Many of the patients reported on by Cremin and others had type III disease[5] and that series included no type IV patients at all (P Beighton, personal communication). Our experience of type IVA osteogenesis imperfecta indicates that excessive numbers of wormian bones are seldom found.[2] Osteopenia is seen in less than half of the patients at the time of the first fracture[2] and even in adults with osteogenesis imperfecta is uncommon in bones not previously fractured.[6]

Details of 773 United Kingdom patients with osteogenesis imperfecta

Sillence type	Total	Parents accused of non-accidental injury	Case conference or care proceedings
Type IA	346	40	2
Type IB	89	3	1
Type II	2	0	0
Type III	120	8	0
Type IVA	98	29	7
Type IVB	67	10	1
Unclassified	51	3	2

Our results indicate that type IVA osteogenesis imperfecta does occur without an obvious family history and without wormian bones or osteopenia. The number of such patients is indeed small, but in the United Kingdom as a whole such cases occur regularly; using either our figures or those of Dr Taitz we have probably failed to recognise some cases. Tragedies such as those of the 13 families who inappropriately faced care proceedings may, in part, be avoided by careful history taking, including a detailed search for all the features of osteogenesis imperfecta and for all the risk factors for non-accidental injury.

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1 Sillence DO. Osteogenesis imperfecta: an expanding panorama of variants. *Clin Orthop* 1981;159:11-25.
2 Paterson CR, McAllion SJ, Shaw JW. Clinical and radiological features of osteogenesis imperfecta type IVA. *Acta Paediatr Scand* 1987;76:548-52.
3 Paterson CR, McAllion SJ, Miller R. Osteogenesis imperfecta with dominant inheritance and normal sclerae. *J Bone Joint Surg [Br]* 1983;65:35-9.
4 Carothers AD, McAllion SJ, Paterson CR. Risk of dominant mutation in older fathers: evidence from osteogenesis imperfecta. *J Med Genet* 1986;23:227-30.
5 Cremin B, Goodman H, Spranger J, Beighton P. Wormian bones in osteogenesis imperfecta and other disorders. *Skeletal Radiol* 1982;8:35-8.
6 Paterson CR, Metacarpal monphometry in adults with osteogenesis imperfecta. *Br Med J* 1978;i:213-4.

Adult epiglottitis

SIR,—Dr S Gerrish and others (7 November, p 1183) reported on four adults with life threatening epiglottitis who presented with typical features of severe upper airway obstruction. We recently admitted a young woman with severe upper airway obstruction due to supraglottitis which was not initially apparent because of coincidental acute severe asthma.

One month before admission this 30 year old woman with a two year history of asthma had been electively ventilated for 72 hours for a severe attack of asthma from which she made an uneventful recovery. She presented with a four day history of sore throat and increasing wheeze. On examination she was feverish (39°C) and in respiratory distress and had widespread bronchospasm but no stridor. She was treated with nebulised β agonists, aminophylline, and steroids. Over the next 24 hours, as her bronchospasm improved, she developed progressive stridor, worsening distress, and respiratory failure (fractional inspired oxygen 0·5; arterial oxygen pressure 9·9 kPa, arterial carbon dioxide pressure 6·7 kPa). Bronchoscopy showed greatly swollen arytenoid cartilages but a normal epiglottis. Radiographs of the neck showed narrowing of the airway by soft tissue swelling localised posteriorly at the level of the vocal cords. Antibiotics and a humidified helium-oxygen mixture produced an initial improvement, but six hours later she deteriorated, requiring elective