

Clinically pseudo-seizures may be mistaken for genuine fits as they are usually tonic-clonic in appearance, although occasionally manifesting as complex partial seizures. Certain features are helpful in differentiation, including gaze aversion, resistance to passive limb movement or eye opening, prevention of the hand falling on to the face, and induction by suggestion.³ Previously normal electroencephalograms, particularly during an attack, or normal serum prolactin concentrations during a pseudo-seizure can be useful in supporting the diagnosis.⁴

Status epilepticus is a medical emergency that requires prompt treatment with anticonvulsants. Patients with pseudo-status epilepticus, however, are more at risk from medical treatment than from their condition, and early recognition of pseudo-seizures would avoid iatrogenic complications. This might be facilitated by rapid access to a register of patients with pseudo-seizures. The register should be held in local accident and emergency departments in the region as these patients may attend many hospitals.

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Plastic bullets in Northern Ireland

SIR,—The article by Mr Robin Touquet and Dr Teresa Challoner is factually incorrect and requires comment.¹ Plastic bullets were first introduced in 1973 and replaced rubber bullets completely in 1975. In that time three people were killed by rubber bullets and 14 by plastic bullets, including seven children. The fatality rate is therefore one per 3857 bullets fired.

The bullet comes in two sizes. The most commonly used is the 25 grain Teflon bullet, which weighs 135 g. We would disagree that the plastic bullet quickly loses its speed and kinetic energy because it is small and fairly light. It is far heavier and more accurate than the rubber bullet it replaced and was designed for short range use in an effort to immobilise rather than kill. It is important that doctors commenting on this controversial subject should at least be factually correct, and a film criticised for being "unsophisticated" should not be met by an equally unsophisticated review.

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- Touquet R, Challoner T. Plastic bullets in Northern Ireland. *BMJ* 1990;301:1053. (3 November.)

AUTHOR'S REPLY,—Messrs Ritchie and Gibbons are correct about the plastic bullet's weight: we meant to say that the bullet is large and fairly light. But the other statistics that we used, including those on fatalities, came from the army, and clarifying any discrepancies is difficult because the Ministry of Defence is reluctant to discuss details.

We were told that there is one size of plastic bullet—3.7 cm by 10 cm, weighing 135 g. Rubber bullets were of a different size and had a different size of charge and thus a different muzzle velocity. They are no longer in use.

The Ministry of Defence has assured us that in Northern Ireland currently only the above size of plastic bullet is being used with one size of charge, giving a muzzle velocity of roughly 250 km/h.

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Trauma in pregnancy

SIR,—Dr Pamela Nash and Mr Peter Driscoll quite rightly stress the priority of resuscitating the pregnant woman, assessment of the fetus forming part of the secondary survey.¹ One aspect that they only touched on is the need for caesarean section after maternal death or when maternal death seems imminent.

There can surely be few tragedies greater than the delivery of a cerebrally damaged orphan secondary to maternal death and fetal anoxia. I would therefore be interested in their views on the cases in which women have major trauma during pregnancy and then have a cardiac arrest. It seems unlikely that external cardiac massage could maintain an adequate placental circulation for long, even in a normovolaemic patient. Prolonged unsuccessful attempts at resuscitation must clearly jeopardise fetal viability. At what stage and on what indication should caesarean section be undertaken if it is to result in the successful delivery of a healthy infant?

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AUTHORS' REPLY,—Before attempting a post-mortem caesarean section it is essential to attain signs of fetal viability and confirm that the estimated gestational age is greater than 26 to 28 weeks. Fetal prognosis is based on the time interval between maternal death and delivery, with delivery within five minutes being associated with best fetal outcome and caesarean section at greater than 20 minutes being unlikely to produce a live fetus.

Before a caesarean section is performed fetal viability must be ascertained and maternal cardiopulmonary resuscitation continued throughout. A vertical mid-line incision should be made through the abdominal layers into the uterus. The fetus is then removed from the uterine cavity and resuscitated by the paediatric team. The cord is clamped and the placenta removed.

There have been occasional reported cases in which the mother has revived after delivery of the fetus, so it is worth continuing cardiopulmonary resuscitation after delivery of the child to assess the mother for signs of life.

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SIR,—Dr Pamela Nash and Mr Peter Driscoll state that caesarean section is indicated when a pregnant woman has died after major trauma.¹

We would like to emphasise the current view that caesarean section should not be regarded as a last ditch effort to save the fetus but as an important part of the armamentarium in maternal cardiopulmonary resuscitation.² The mechanism for improved maternal survival probably includes complete resolution of aortic caval compression associated with emptying the uterus rather than partial relief brought about by using the lateral position.³

We are currently studying the resuscitation skills of obstetric and midwifery staff and have found that the misconception that caesarean section is performed only to increase fetal survival to be commonplace. We would therefore commend readers to refresh their knowledge of resuscitation of pregnant women by reference to recently published reviews of the subject such as that by Rees and Willis.²

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Readmission rates

SIR,—Certain points in the triad of papers by Dr Alan Clarke and colleagues¹⁻³ require further clarification.

In calculating rates of readmission the inclusion of planned readmissions and day cases in the numerator and the use of live discharges as a denominator (rather than total deaths and discharges) may lead to artificial differences between specialties and services—for example, those where patients are routinely admitted to die.

When audit of a sample of case notes of patients readmitted was undertaken as a means of determining avoidability of readmission, it should be remembered that this was in part an audit of the completeness of the documentation of those notes. In addition, a substantial proportion of notes were not obtainable, and one explanation might be that this group represented a subset of patients with chronic relapsing conditions whose case notes were required at day hospital or outpatient clinics, thus excluding a sizeable group with chronic or recurrent illness who would have been classified as unavoidable readmissions.

At this juncture it would seem that no single measure is a reliable or robust indicator of outcome. Any combination of indices used for this purpose will require some estimation of case mix to be included. Until complete readmission data are available and responsive to case mix and severity it will not be possible properly to assess their potential role as part of an outcome indicator profile for an individual unit, hospital, or district. It is difficult to perceive a useful outcome indicator that is not subject to the "perverse incentive," whether by admission or discharge controls as well as the confounding factors of variability in community and primary care services.

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Delayed detection of congenital hearing loss

SIR,—We agree with Dr N J Wild and colleagues that hearing impairment in infants should be diagnosed as early as possible.¹ We were interested that they found that no children were misdiagnosed as hearing impaired or unaffected by brain stem evoked audiometry. This technique assesses the