Letters to the editor

‘A National UK Audit into epilepsy-related deaths’
SIR—Every year almost 800 people in England and Wales die from epilepsy. Patients of all ages with epilepsy have an increased mortality risk of approximately two to three times that of the general population.

Some of these deaths may be due to a complication of a seizure (e.g. head injury, drowning), convulsive status epilepticus, or a related underlying condition, including a neurodegenerative disorder or severe cerebral palsy. There remain a number of people with epilepsy whose death cannot be adequately explained and it is to this group that the syndrome of sudden, unexpected death in epilepsy (SUDEP) has been attached. The syndrome is poorly understood, particularly in children and many different mechanisms are likely to be responsible for it, including fatal cardiac dysrhythmia (possibly representing an autonomic seizure) or a severe prolonged disturbance of brain-stem function by epileptic discharges (possibly resulting in a respiratory or cardiac arrest). In children, SUDEP has been compared to sudden infant death (SIDS), which hypothesises that many sudden deaths in epilepsy may be preventable. The syndrome is almost certainly under-recognized by health-care professionals.

It is important to investigate this phenomenon in more detail in an attempt to identify specific risk factors and potentially preventable causes; this information should then facilitate a more appropriate and realistic counselling of families when discussing SUDEP.

The Royal Colleges (of Paediatrics and Child Health, Physicians, Psychiatrists, General Practitioners, Pathologists and Nursing) have been asked to undertake a prospective National Sentinel Audit investigating the circumstances of all epilepsy-related deaths. The audit is coordinated by the charity Epilepsy Bereaved and funded by the Department of Health through the National Institute for Clinical Excellence (NICE). It will audit the type and severity of epilepsy, ante-mortem access and quality of care of both primary and secondary care services (including antiepileptic drug treatment), and the postmortem examination and certification of deaths of all patients with epilepsy. Audit criteria, standards, and tools are currently being developed for health professionals, pathology departments, coroners’ services, and bereaved families, and the audit is due to commence in late 1999 for a 12-month period.

The primary objective of this audit will be to investigate the standards of determining epilepsy-related deaths as well as evaluating the standards of services provided before the person’s death. It is also hoped that the results of this National Sentinel Audit will identify specific risk and more importantly, possible preventable factors in some epilepsy-related deaths at all ages.

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References

‘A woman with Prader–Willi syndrome gives birth to a healthy baby girl’
SIR—A 33-year-old woman with clinical and genetic characteristics of Prader–Willi syndrome (PWS) gave birth to a healthy child. This first, as far as we know, reported pregnancy and birth appeared to be related to treatment with serotonin reuptake inhibitors.

The woman’s symptoms were characteristic of PWS. This diagnosis was given when she was 13 years of age. DNA methylation studies using the probe D15S63 (PW–71) and a methylation sensitive probe (the small nuclear ribonucleoprotein N gene [SNRPN]) confirmed the diagnosis. However, cytogenetic examination and fluorescence in situ hybridization (FISH) did not detect any deletion.

Therefore, maternal uniparental disomy was the suspected genetic cause of her syndrome.

The woman had primary amenorrhea. Because of a bad temper with aggressive tantrums and stubbornness, she had been prescribed thiordazine, first administered at 23 years of age, for several years. At age 25 years she reached a weight of 118 kg (height 146 cm, corresponding to a body mass index of 55.4). From 29 years of age she also received citalopram 10 mg daily, and her behaviour improved rapidly. After the introduction of citalopram, she started to menstruate and became regular (4-week intervals). After 19 months on this medication (15 months before conception) citalopram was discontinued to evaluate its effect. She soon became more agitated and aggressive and was referred to a psychiatric ward for a few weeks. After the discontinuation of citalopram her menstrual bleedings became sparse and sporadic.

Six months after the withdrawal of citalopram she had abdominal pains, and was given medroxyprogesterone 5 mg for 10 days, which induced one menstruation. One month later (8 months before conception), fluoxetine 10 mg daily was prescribed to evaluate whether the effect of this drug would be better than that of citalopram. Again her behaviour improved, but menstruations did not return. Because of rapid weight reduction (to 55.2 kg), fluoxetine was discontinued 6 weeks later.

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Further information about, and participation in the National Audit may be obtained from the authors.

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References
A few months before this she had started a sexual relationship. One month after her latest bleeding, she started taking contraceptives.

At the end of the third trimester pregnancy was verified. A girl was delivered by cesarean section, because of maternal dystocia, after an estimated 41 weeks of gestation. The amniotic fluid was discoloured by meconium, but the foetus appeared healthy at birth, with Apgar scores of 9, 10, and 10 at 1, 5, and 10 minutes, respectively. Birthweight (3650 g), length (51.0 cm), and head circumference (33.0 cm) were all normal for gestational age. There were no signs of hypotonia or other clinical signs of PWS/other congenital malformations. During the 5 days of care in the neonatal intensive-care unit there were no signs of medication withdrawal. The baby received milk formula, and her lowest weight was 3520 g. Bacterial cultures from the ear and rectum were negative and routine blood counts were normal. The SNRPN probe, and FISH tests did not indicate PWS or Angelman syndrome. At 4 months of age the girl is doing well with body size and psychomotor development within normal age limits.

As far as we know, pregnancy and child birth have never been reported in women with PWS with a clearcut clinical and genetic diagnosis. However, the possibility has been discussed6–7. Hormonal and neurochemical abnormalities have been detected in individuals with PWS. Gonadotrophic hormone production is low8. The production of gonadotropins is believed to be under the control of serotonergic activity9,10. In the present case, the medication with serotonergic drugs influenced gonadotropin release in the present case and induced hormonal conditions required for pregnancy. The observations suggest that serotonin may play a part in the pathogenesis of PWS. Gonadotropic hormone production is low8. The production of gonadotropins is believed to be under the control of serotonergic activity9,10. In the present case, the medication with serotonergic drugs influenced gonadotropin release in the present case and induced hormonal conditions required for pregnancy. The observations suggest that serotonin may play a part in the pathogenesis of PWS. Also, this pregnancy in a woman with PWS highlights the need for modified information to parents and staff in respect of reproductive ability in PWS.

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