has previously been reported in three cases as a result of thoracentesis.^{4,5} Fortunately, the initial needling, fluid aspiration, and chest drain insertion in our case did not cause a gastric leak or perforation. Barium meal showed bowel loops in the left hemithorax and prompted surgical intervention. Computed tomography of the chest was unhelpful as the findings were misinterpreted. The final diagnosis in our case was made on thoracotomy. We did not identify a contributory factor in our patient; an association with metachromatic leukodystrophy is unknown.

In summary, the diagnosis of pneumothorax should not be too readily accepted in the absence of an explanation. Spontaneous rupture of the diaphragm in children is very rare

but should be considered in such circumstances. A barium meal will lead to the correct diagnosis but a plain chest x ray with a nasogastric tube in situ may alert one to the possibility of this diagnosis.

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Vagal nerve stimulation for epilepsy

Children with intractable epilepsy are a therapeutic challenge. In meeting that challenge it is important to have constantly in mind what it is hoped to achieve. The aim must be significant improvements in quality of life for the child and the family. Fairly minor reductions in seizure frequency may not achieve that aim.

By mechanisms that are not known, stimulation of the left vagus nerve reduces seizure frequency in experimental animals. Studies in adults have led to this procedure being approved in the USA for patients over the age of 12. Now the paediatric data (19 patients) from two multinational trials, which mostly contained adults, have been reported together with data on 41 children treated in an uncontrolled fashion (Jerome V Murphy and the Pediatric VNS Study group. *Journal of Pediatrics* 1999;134:563-6; see also editorial, *Ibid*: 532-3). A stimulator is implanted under the skin of the chest wall with an electrode on the left vagus nerve in the neck. Standard practice is 30 seconds on and 5 minutes off continuously. In children aged 3-18 with various types of seizure there was a reduction in seizure frequency by 23% at 3 months, rising to 42% by 18 months. No correlation was found between seizure type or cause and response. In some patients stimulation caused cough, fever, headache, or voice change. The device eroded through the skin in one patient.

This report serves to emphasise the importance of paediatric trials, performed on children and designed to provide the answers that patients, their families, and their doctors want and need. It does not answer the most important question; were they better off for the intervention? It seems unclear whether vagal stimulation might provide real benefit for some children or whether, like the cerebellar stimulation briefly in vogue some 25 years or so ago, it will prove just another fad.

ARCHIVIST