and anticonvulsants act synergistically³ and similarities between the fetal anticonvulsant and alcohol syndromes have been noted.⁴ Consequently, we wonder whether palatal function may be particularly susceptible to the teratogenic effects of alcohol or anticonvulsants, or both, and suggest that if such an effect were confirmed by others this would be a useful diagnostic pointer in these disorders.

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Clinical significance of gastro-oesophageal reflux

Sir,

Professor Carré is right to emphasise the frequency of unimportant gastro-oesophageal reflux in babies and children.¹ It is possible to induce radiologically identifiable gastro-oesophageal reflux in almost any normal child. He is correct, therefore, in advising caution in attributing a whole gamut of symptoms to what may be a coincidental physiological event.

Unequivocal intrathoracic stomach is a rarity, and when it exists with reflux both are important and in need of management. Professor Carré states that the recognition of an intrathoracic stomach is all important and implies that in its absence reflux is of no significance. We would disagree with him on this. We have identified an intrathoracic stomach definitely in only four patients, and equivocally in a further one patient out of 18 who have needed recent fundoplication. In five patients there were severe strictures but in only one of these was there a partially intrathoracic stomach.

Eleven of the 18 patients had a funnel shaped gastro-oesophageal junction with no intra-abdominal oesophagus. This radiological sign may be important. From this sign some might infer that there is intrathoracic stomach mucosa and elevation of the lower oesophageal sphincter—as illustrated in Professor Carré's Figs. 3 and 4.¹ Failure of the oesophagus to empty itself of refluxed material may also be important. Funnel shaped gastro-oesophageal junction and persistence of refluxed material can be identified also in children whose vomiting resolves without developing severe complications of gastro-oesophageal reflux requiring surgery. They are not absolute signs of poor prognosis.

We suggest that there are factors other than a detected intrathoracic stomach which result in a poor prognosis for

gastro-oesophageal reflux, and to try to identify these factors using new techniques is justifiable, and should be encouraged.

Reference

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Ultrasound and the diagnosis of Wilms' tumour

Sir,

We read with interest the paper on the usefulness of ultrasound in the management of abdominal malignancy by Kohler *et al.*¹ They have assessed the performance of the ultrasound scan by calculation of its diagnostic accuracy and state that ultrasound is no more efficient than intravenous urography in the diagnosis of Wilms' tumour and neuroblastoma. The efficiency of a test, however, is calculated in the following manner:—

	Patients with a positive ultrasound scan for Wilms' tumour	Patients with a negative ultrasound scan for Wilms' tumour	Total
Patients with Wilms' tumour	36 (TP)	5 (FN)	41
Patients without Wilms' tumour	6 (FP)	56 (TN)	62
Total	42	61	103

TP=true positive; TN=true negative; FP=false positive; FN=false negative.

The efficiency of any diagnostic test is the percentage of all results which are true results, whether positive or negative, and may be obtained by adding the number of true positive results to the number of true negatives and dividing by the total number of subjects tested.² The diagnostic efficiency of ultrasound for Wilms' tumour in the study population is, therefore, $36 + 56/103 = 89.3\%$.

The authors are not justified in stating that ultrasound is no more efficient than intravenous urography in the diagnosis of Wilms' tumour and neuroblastoma without such efficiency calculations.

Similarly, the term diagnostic sensitivity has been used in a loose sense. The sensitivity of any diagnostic test is the percentage of true positive results obtained when a test is applied to patients known to have the disease and is obtained by dividing the number of true positive results by the total number of true positive and false negative results.³ For example, the diagnostic sensitivity of ultrasound for Wilms' tumour in the study population is $36/41 = 87.8\%$.

In their paper the authors have equated diagnostic sensitivity with diagnostic accuracy which is not the case. The terms diagnostic accuracy, diagnostic sensitivity, and