jects studied by Troncale *et al.* did in fact have a subnormal value for xylose absorption, as did individual subjects in both of the two references cited by Troncale *et al.*, in which mean values were normal.^{1,2} Other studies among comparable asymptomatic populations have revealed malabsorption of xylose in 68% of those previously studied in Thailand by Sprinz *et al.*,³ in 40% in East Pakistan,⁴ in 68% in West Pakistan,⁴ in 20% in South India,⁵ in 57%⁶ and in 37%⁷ in two separate studies in Puerto Rico, and in 100% in rural Haiti.⁸ Thus, far from refuting previously reported findings from Thailand and elsewhere, Troncale *et al.* have presented corroborative evidence. Impaired absorption of lactose was also found to be universal among the Thais studied by Troncale *et al.*, who dismissed the possibility that this may be additional evidence for an acquired functional defect of the diseased intestinal mucosa. However, such may well be the case in view of the facts that (1) evidence has not been presented which indicates that Thais have a genetic predilection for deficiency of lactase and (2) it is well recognized that lactase deficiency can be acquired both in tropical sprue^{9,10} and in protein malnutrition.¹¹

Troncale *et al.* conclude that their data militate against the hypothesis that the intestinal lesion found both in overt tropical and in asymptomatic individuals may in some instances be related, since, as they state: "these results [of xylose absorption in asymptomatic Thais] are clearly higher than those found in classical tropical sprue." This writer finds himself increasingly hard put to know exactly how one defines "classical" tropical sprue and is unaware of any set range of reduced values of xylose absorption that are characteristic for overt tropical sprue, but he would like to point out that values similar to those found in some asymptomatic Thais by Troncale *et al.* have been noted in individual patients with overt tropical sprue who have been seen both at this clinic^{12,13} and elsewhere.¹³ O'Brien and England have reported that xylose absorption in British soldiers with overt tropical sprue in Malaya became progressively more impaired as the intestinal lesion became more severe in advanced cases.¹³ Thus, one might anticipate that impairment of xylose absorption would in most instances be less severe in asymptomatic subjects than in patients with overt tropical sprue, a fact which we have ascertained to hold for the rural population of Haiti.¹⁴

Finally, Troncale *et al.* have neglected to supply one essential piece of information. Does tropical sprue exist in Thailand? This writer is unaware of any publication in the English literature confirming the existence of this disease in that country. Nonspecific jejunal abnormalities have been found among a high proportion of the asymptomatic population in both Africa¹⁵ and the Middle East,¹⁶ areas in which overt tropical sprue is not recognized. In these circumstances no one has proposed that the intestinal lesion in these subjects bears any relationship whatsoever to tropical sprue. Unless tropical sprue does indeed exist in Thailand, the observations presented by Troncale *et al.*, while of interest in that they confirm previous observations made by others in Thailand and elsewhere, probably have little relevance to the issue of whether the intestinal lesion found in asymptomatic subjects in South India, Puerto Rico, and Haiti has a relationship to that found in

subjects with overt tropical sprue in these areas.—I am, etc.,

FREDERICK A. KLIPSTEIN.

Columbia University College
of Physicians and Surgeons,
New York, U.S.A.

REFERENCES

- Lindenbaum, J., Alam, A. K. M. J., and Kent, T. H., *Brit. med. J.*, 1966, **2**, 1616.
- Gardner, F. H., and Santiago, E. P., *Arch. intern. Med.*, 1956, **98**, 467.
- Sprinz, H., Sribibbhadh, R., Gangarosa, E. J., Banyajati, C., Kundel, D., and Halstead, S., *Amer. J. clin. Path.*, 1962, **38**, 43.
- Russell, P. K., Aziz, M. A., Ahmad, N., Kent, T. H., and Gangarosa, E. J., *Amer. J. dig. Dis.*, 1966, **11**, 296.
- Baker, S. J., Ignatius, M., Mathan, V. I., Vaish, S. K., and Chacko, C. C., in *Ciba Foundation Study Group No. 14 on Intestinal Biopsy*, edited by G. E. W. Wolstenholme and M. P. Cameron, 1962, p. 84. London.
- Robins, S. J., Garcia-Palmieri, M., and Rubio, C., *Ann. intern. Med.*, 1967, **66**, 556.
- Angel, C. R., Guerra, R., Martinez, J., and Plough, I. C., *Fed. Proc.*, 1963, **22**, 550.
- Klipstein, F. A., *Ann. intern. Med.*, 1967, **66**, 622.
- Sheehy, T. W., and Anderson, P., *Lancet*, 1965, **2**, 1.
- Desai, H. G., Chitre, A. V., Parekh, D. V., and Jeejeebhoy, K. N., *Gastroenterology*, 1967, **53**, 375.
- Bowie, M. D., Brinkman, G. L., and Hansen, J. D. L., *J. Pediatr.*, 1965, **66**, 1083.
- Klipstein, F. A., *Gastroenterology*, 1964, **47**, 457.
- O'Brien, W., and England, M. W. J., *Brit. med. J.*, 1966, **2**, 1157.
- Klipstein, F. A., Samloff, I. M., Smarth, G., and Schenk, E. A., *Amer. J. clin. Nutr.*, in press.
- Banwell, J. G., Hutt, M. S. R., and Tunnicliffe, R., *E. Afr. med. J.*, 1964, **41**, 46.
- Parkins, R. A., Eidelman, S., Perrin, E. B., and Rubin, C. E., *Amer. J. clin. Nutr.*, 1966, **18**, 134.

Haemophilus Epiglottitis

SIR,—Among their 22 fatal cases of respiratory infection in childhood the Newcastle group of doctors (Dr. P. S. Gardner and others, 11 November 1967, p. 316) included one case of haemophilus epiglottitis. This condition, they write, appeared to be particularly serious and may often remain unrecognized. This is especially unfortunate, since it has been contended that in areas of the U.S.A. where doctors are alert to the occurrence of this illness prompt recognition and treatment with tracheotomy and appropriate antibiotics result in a high recovery rate.

We can confirm that the condition may indeed be relatively frequent and rapidly fatal on the strength of the following two cases, which we were able to study in the course of the last two months. The first occurred before the publication of the Newcastle report and the second after it. We did not succeed in growing any pathogens in the first case from post-mortem material collected by the usual methods, but, thanks to the information contained in the report, *Haemophilus influenzae* was grown from the epiglottis of the second case.

Case 1.—A previously completely healthy boy aged 3 years vomited suddenly one evening and then became dyspnoeic. His condition worsened and the following afternoon he was admitted to hospital with laryngeal stridor, tachypnoea, and tachycardia. He was treated with ampicillin, cloxacillin, chlorpromazine, and digoxin, but collapsed a few hours after admission, and despite full resuscitation measures, including laryngoscopy and intubation, died eight hours after admission. There was never at any time clinical indication of respiratory obstruction sufficient to require intubation, nor was this measure helpful when performed. Necropsy was performed on coroner's instructions 12 hours after death. The epiglottis was found to stand

out sentinelwise, red and swollen. The ary-epiglottic folds were likewise inflamed and somewhat nodular. The anterior part of the laryngeal vestibule was roughened and in part covered by a pale membrane. The trachea and main bronchi were grossly inflamed and contained blood-stained serous exudate. The lungs were completely collapsed. The brain was grossly oedematous and the cerebral convolutions flattened. No bacterial pathogens could be isolated from swabs taken from the nose, epiglottis, larynx, or lungs. This may have been due to the effect of the antibiotics. The results of HeLa, monkey kidney, and human amnion cell inoculation with bronchial and laryngeal exudate for viruses were negative, and so was suckling mouse inoculation. Histological examination of the epiglottis and larynx showed gross mucosal infiltration with pus cells. The lungs showed collapse but no bronchopneumonia.

Case 2.—This 18-month-old boy went off his food for a day or two before he began vomiting one night at 11 p.m. At 3 a.m. the following morning he developed stridor and became dyspnoeic and cyanotic. On admission to hospital at 10.30 a.m. he was found to have pyrexia and enlarged cervical glands. He was treated with ampicillin, cloxacillin, mist tent, and oxygen. There was intercostal recession, but this improved somewhat on treatment. However, an hour later he collapsed; immediate intubation was performed without difficulty, but there was no improvement, and he died shortly thereafter within one and a half hours of admission. Necropsy was performed, again on coroner's order, 47 hours after death. As in the previous case there was epiglottitis and laryngitis. The lungs were oedematous and showed scattered intrapulmonary haemorrhage. In this case a small quantity of serum broth was injected into and aspirated from the submucosal tissue of the epiglottis, and *Haemophilus influenzae* Pittman type b was grown from this specimen. The brain, as in Case 1, showed marked oedema. Histological examination of the tissues is not yet complete.

It seems to us that not only clinicians but pathologists should be aware of haemophilus epiglottitis, since the condition may not only be rapidly fatal but is easily overlooked, and the organisms are difficult to grow in such cases.¹ In spite of stridor and croup in our two cases the fatal outcome was not due to upper respiratory obstruction, and intubation was not helpful. Death was probably caused by pulmonary collapse, peripheral circulatory failure, and rapidly developing cerebral oedema.—We are, etc.,

L. CROME.

MAGDOLNA ERDOHAZI.

DAVID LAWSON.

Queen Mary's Hospital
for Children,
Carshalton, Surrey.

REFERENCE

- Turk, D. C., and May, J. R., *Haemophilus influenzae: Its Clinical Importance*, 1967. London.

Idiopathic Facial Palsy

SIR,—Dr. D. Taverner and his colleagues (9 December, p. 581) state that A.C.T.H. gel should be used routinely for the treatment of idiopathic facial palsy, claiming to have shown that it reduces the incidence of denervation from 40% to 13%. They also claim that cases which suffer denervation despite this treatment have a better result—that is, denervation is less severe (or re-innervation more successful?). A so-called "shift to the right."

Such sweeping claims require close examination, since they are not based upon a con-