venting chest infections, we believe the prone position is all-important. "Keep them off their backs" should be the constant watchword to nurses, who may not remember that the trachea runs backwards and that unconscious or drugged patients on their backs will therefore retain respiratory secretions which can become infected in a few hours. Inhalation of vomit is much less likely to occur if the patient is lying prone. We are convinced this simple manœuvre is much more important to the patient than "preventive" antibiotics, "frequent turning," "laryngeal toilet," etc. Another excellent reason for "keeping them off their backs" is lessening the danger of phlebothrombosis, particularly in the soleus intramuscular veins. Gibbs[2] showed this to be the most common site of phlebothrombosis and noted that dependent drainage here will be obtained when the patient is lying prone.

Prevention of spasms can only be achieved with certainty by relaxants such as curare. But this automatically entails artificial respiration with all the complexities, strain on medical and nursing staff, etc. If one advocates such a regime for severe tetanus, what are to be the indications for adopting it in a particular case? Is it to be the first "generalized spasm" as defined above? A patient recently observed died in the first such spasm. Is failure of conservative methods to be the criterion? Another patient was admitted with frequent spasms which were apparently controlled satisfactorily by thiopentone and chlorpromazine. On the fourth day, without any obvious warning, he then had a general spasm and died. If curarization and intermittent positive-pressure artificial respiration (I.P.P.R.) regime is started, when should it be stopped? One patient with a 24-hour onset period was treated by the respiration unit here for 13 days with the I.P.P.R. regime, but continued to have general spasms for 48 hours after the machine was stopped. Are such spasms hazardous to life even though the intoxication is on the wane?

There are so many questions to which there seems no satisfactory answer. Indeed, there are so many variables in tetanus that the greatest caution is needed in concluding any particular line of treatment is an advance—for the patient. Creech and his colleagues,[3] in a masterly review of probably the largest published series ever treated in one hospital, showed a falling trend in mortality interrupted by "bad years" over the last 50 years, a fall rather similar to tuberculosis before the days of streptomycin and isoniazid. The trend could not be convincingly correlated with any of the so-called advances such as antiserum, sulphonamides, antibiotics, tracheotomy, or gastrostomy. In 1949 they had 19 successive patients, all of whom recovered. As they remark, if some new treatment had been tried out during these admissions, it would have been tempting to attribute the success to the innovation. But the final mortality for that year was higher than any other year from 1946 to 1956. Dr. Johnstone had the courage to withhold antiserum. Would it be justifiable to withhold sedative drugs as well? How many patients are killed by the "treatment"?—We are, etc.,

H. A. REID.
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L. T. SCOTT.

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REFERENCES

1 Cole, L., *Brit. med. J.*, 1953, **1**, 150.
2 Gibbs, N. M., *Brit. J. Surg.*, 1957, **45**, 209.
3 Creech, O., Glover, A., and Ochsner, A., *Ann. Surg.*, 1957, **146**, 369.

Aural Deformity and Renal Agenesis

SIR,—I wish to refer to the report by Dr. D. Hilson entitled "Malformation of Ears as Sign of Malformation of Genito-urinary Tract" (*Journal*, October 5, 1957, p. 785). Dr. Hilson's findings are of unusual interest, and are borne out in a report entitled "Bilateral Agenesis of the Kidneys," by Dr. James H. Duxbury.[1] A photograph in Dr. Duxbury's report (Fig. 1) of a profile view of the head and face of the patient under discussion reveals abnormalities of the ear strikingly similar to those noted in the patient pictured in Fig. 11 of Dr. Hilson's article. It is possible that Dr. Hilson has described an association of findings which, if confirmed by other reports of similar findings, might warrant permanent recognition and incorporation into the teachings of physical diagnosis.—I am, etc.,

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REFERENCE

1 Duxbury, James, *Canad. med. Ass. J.*, 1958, **78**, 123.

Acute Otitis Media

SIR,—There are some comments I would like to make relating to your leading article on acute otitis media (*Journal*, February 8, p. 328). You state that "few will disagree with F. W. Davison, who found that otitis media occurs more often in children with enlarged adenoids; experience in Great Britain would generally confirm that adenoidectomy prevents recurrences in a high proportion of cases." Earlier, however, you report that "such data as were obtained [by the M.R.C. Survey] on the significance of tonsillectomy and adenoidectomy in relation to recurrence of acute otitis media showed no difference that could be attributed to the operation." It therefore appears that the report does not justify your statement.

Secondly, you state that "the lower incidence of acute otitis media in adults is in part due to the atrophy of this lymphoid tissue [involving the Eustachian tubes], which usually takes place after puberty." This must surely be regarded as a very minor factor, since the dramatic decline in the incidence of acute otitis media occurs at about 7 years of age.—I am, etc.,

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Research Workers and Pre-registration Year

SIR,—Professor L. J. Witts suggests (*Journal*, January 25, p. 222) waiving the pre-registration year for full-time research workers, who have, by implication, qualified in medicine to get more money. As an ex-student of his, without disloyalty, may I suggest that that is infamous? On qualification, it is now up to a prospective doctor to learn his job, and to prove that he can discharge it, in the compulsory pre-registration year. If in the future any of these half-fledged doctors have to practise medicine—for instance, in the unhappy event of an atomic war—I shudder to think of the consequences.—I am, etc.,

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Carpal Tunnel Syndrome

SIR,—Encouraged by the good results of treating stenosing tendovaginitis of the radial styloid and the trigger fingers with the local injections of hydrocortisone, I have during the last 18 months been treating cases of carpal tunnel compression syndrome by the same method. It was Nissen[1] who reported thickening of the flexor tendon sheaths in the carpal tunnel in cases of the syndrome and who suggested that this thickening might reduce the capacity of the tunnel and so compress the nerve. Phalen and Kendrick[2] observed thickening of the "flexor synovialis" in 70% of cases on which they operated. They too have treated 20 of their more recent cases with hydrocortisone injections, with good results in 16. In two of my cases treated by operation, granulation tissue was observed to be investing the tendons, and in others a thickening, as described by Nissen, was noted. It would appear therefore that a chronic tenosynovitis is the most likely cause of the syndrome.

Twenty-four cases of the syndrome have been treated by local injections of 0.5–0.75 ml. of hydrocortisone acetate into the tunnel. The needle has been inserted from the wrist at a point on the ulnar side of the palmaris longus tendon. Three patients were eventually operated on; the first, having osteoarthritis of the wrist and carpus, did not obtain any relief from the hydrocortisone; the other two obtained a dramatic response to the injections, but one was submitted to operation to find out why she could not flex her fingers fully, and this patient was one of those who had granulation tissue covering the tendons in the tunnel and in the finger sheaths. The symptoms of the third case recurred when she returned to work as a weaver on three or four occasions, and, having developed a phobia about injections, she asked for operative treatment.

Eight patients have been completely relieved for nine to eighteen months; four had only one injection, the other four had received two or three injections. Three cases have been relieved for periods between three and nine months; one relapsed slightly five months after his first visit, another ten months afterwards, but both responded to another injection. Seven patients have been completely free of symptoms for periods varying from one