

recur. The extent of the pneumothorax, provided the underlying lung seems normal, does not seem to affect the prognosis. There are, of course, exceptions to this general statement—e.g., a young man who developed a spontaneous pneumothorax in the Antarctic wished to return there for two years, and pleurodesis was carried out although he had had only a single attack.

#### Poliomyelitis Season in Western Europe

**Q.**—*Is the poliomyelitis season broadly the same for all Western European countries? Do any of these countries consistently have a markedly higher or lower incidence of paralytic disease than the others?*

**A.**—The comparison of poliomyelitis notification rates in different countries is complicated by differences in completeness of reporting and in the clinical standards used in classifying paralytic and non-paralytic forms of the disease. Broadly speaking, however, the epidemic season is the same in all the countries of Western Europe—a steep rise from June to a peak in September, followed by a sharp fall in the next three months. The experience of different countries differs considerably from year to year, but in the period 1946–9, for example, certain countries such as Switzerland and Sweden had consistently higher rates than others like France. The Swiss rates, averaging 16 cases of poliomyelitis (paralytic and non-paralytic combined) per 100,000 of the population, were roughly five times those of France. In the United Kingdom the rates averaged around 9 per 100,000, but there were smaller communities such as Iceland where the notification rates were as much as 30 times those in Switzerland.

The risk of foreign travel is difficult to assess. The year-to-year fluctuations in incidence are such that stability in these relative rates of reported infection cannot be assumed. Again, the high attack rates in Scandinavia, for example, would not necessarily apply to visitors coming from countries like the United Kingdom where the immunity levels may differ widely from those of the native populations.

#### General Irritability after First Prophylactic Inoculation

**Q.**—*Following the first injection of a diphtheria-tetanus-pertussis (triple) prophylactic in a child of 10 months, there was a general reaction, lasting 24 hours, consisting of fever, extreme irritability (frequent crying, disturbed sleep, apparent pain or tenderness on being handled), and impaired appetite. Is this reaction likely to be repeated after the next injection? Is it possible for sensitivity to develop following the first injection so that the reaction to a second might be more severe?*

**A.**—Although a small percentage of babies may be unduly quiet and sleepy after an injection of diphtheria-pertussis or diphtheria-tetanus-pertussis (triple) prophylactic, cases of the reverse condition—i.e., excessive irritability, with frequent crying and pain or tenderness on handling, lasting for a period up to 24 hours—have also been reported, but are rare.

The cause of the trouble is uncertain. A general reaction of this type is probably mainly associated with prophylactics containing pertussis vaccine, whether combined or otherwise; but prolonged crying also occurs sometimes after diphtheria-tetanus and other “pertussis-free” prophylactics. A number of factors are doubtless involved, including the site and depth of the injection, the coexistence of teething troubles, the very rare leakage of prophylactic from the inoculation area into a small vein, an allergic diathesis, and, of course, the child's general health and upbringing.

As the aetiology in the present case is so doubtful, the two queries cannot be answered with any confidence. In a number of children the second injection would not be associated with similar symptoms. Secondly, in the individual case, some degree of sensitization is possible but unusual in early life. In view of the child's history of a distressing general reaction the use of a small “detector dose”—say, 0.1 ml. 24 hours before the full second dose—is indicated as a precautionary measure. Presumably post-

ponement of injections for a few weeks has also been considered. In the event of further trouble single antigens should probably be used, beginning with small amounts to test tolerance. Antihistaminic and sedative drugs in appropriate doses are sometimes helpful in alleviating symptoms.

#### NOTES AND COMMENTS

**Hygiene for Barbers' Shops.**—Mr. P. A. LINCOLN, M.Sc. (Technical Manager, Milton Industrial Chemicals Ltd., London, W.1), writes: In “Any Questions?” (February 18, p. 411) reference is made to a recent paper by the writer<sup>1</sup> concerning the use of a quaternary ammonium compound for the disinfection of barbers' instruments. The comment is made that the composition of the preparation used was not fully disclosed, and in this connexion we would suggest that more information was provided in this respect than is customary with proprietary preparations. The nature, the source, and the concentration of the quaternary ammonium compound were disclosed. True, no reference was made to the halide ion associated with the quaternary ammonium compound, but this in no way influences the bacteriological results obtained.

In view of the fact that the paper in question did not report any of the tests carried out on fungi, it may be of interest here to record the results on *Microsporium audouini*. *Method:* Age of culture used, two weeks. Inoculum, spores from five colonies emulsified in 10 ml. Ringer. 1 ml. of this suspension added to quaternary ammonium compound. Quaternary ammonium compound, 250, 2,000, and 10,000 p.p.m.; 10-ml. quantities. Neutralizer, 9 ml. of 5% “lubrol W.” 1 ml. of the mixture of spore suspension and quaternary ammonium compound added to neutralizer. Control, 10 ml. sterile distilled water. Contact times, 2, 5, and 10 minutes. Medium, 10 ml. Sabouraud's agar. Incubation at room temperature for 14 days.

#### Results

Control	Time	Dilution of Compound under Test		
		250 p.p.m.	2,000 p.p.m.	10,000 p.p.m.
++	2 minutes	++	++	—
++	5 minutes	++	—	—
++	10 minutes	++	—	—

(++ = Growth. — = No growth.)

Since 2,000 p.p.m. of “desool” was recommended for a prolonged contact time or higher concentrations for shorter periods of time, it is clear that the recommendations made are adequate for the control of *Microsporium audouini*.

Your contributor, referring to the work of Barnes, Smith, and Stacy,<sup>2</sup> indicates that two quaternary ammonium compounds were employed by these workers, whereas in fact they examined two proprietary materials which were commercial forms of the same quaternary ammonium compound, and hence the results are virtually those on a single quaternary ammonium compound obtained in duplicate.

#### REFERENCES

- Lincoln, P. A., *Sanitarian*, 1955, 64, 4.
- Barnes, L. A., Smith, B. A., and Stacy, I. B., *Nav. med. Bull. (Wash.)*, 1949, 49, 147.

**Corrections.**—In the last paragraph of Dr. M. S. Pathy's letter (*Journal*, April 7, p. 803) the words “. . . 50% glucose causes an undeniable rise of the osmotic pressure . . .” should have read “. . . 50% glucose causes an undesirable rise of the osmotic pressure.”

In the leading article on “Pulmonary Function in Pneumoconiosis” in last week's *Journal* (p. 790) we should have made it clear that J. C. Gilson and P. Hugh-Jones were the first to use carbon monoxide as a clinical test of the absorption of gases in the lungs. Marie Krogh described the experimental use of the test in the *Journal of Physiology* in 1915 (vol. 49, p. 270).

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 4499. TELEGRAMS: *Atiology, Westcent, London*. ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated. Authors desiring REPRINTS should communicate with the Publishing Manager, B.M.A. House, Tavistock Square, W.C.1, on receipt of proofs. ADVERTISEMENTS should be addressed to the Advertisement Director, B.M.A. House, Tavistock Square, London, W.C.1 (hours 9 a.m. to 5 p.m.). TELEPHONE: EUSTON 4499. TELEGRAMS: *Bri-medads, Westcent, London*. MEMBERS' SUBSCRIPTIONS should be sent to the SECRETARY of the Association, TELEPHONE: EUSTON 4499. TELEGRAMS: *Medisecra, Westcent, London*. B.M.A. SCOTTISH OFFICE: 7, Drumsheugh Gardens, Edinburgh.