Any Questions?

We publish below a selection of those questions and answers which seem of general interest. It is regretted that it is not possible to supply answers to all questions submitted.

Pregnancy Tests

Q.—*We frequently receive pamphlets advertising tablets for pregnancy tests containing ethisterone and ethinyl oestradiol which, if administered during the early weeks of pregnancy, are harmless, but if the amenorrhoea is not due to pregnancy will produce a period. In view of the anxiety caused by some modern drugs is this a perfectly safe procedure?*

A.—There would seem to be no evidence whatever that the tablets on the market containing ethisterone and ethinyl oestradiol (and similar progestagen–oestrogen mixtures) for use as a pregnancy test have ever been responsible for harmful effects on a pregnancy. Nevertheless, in view of the current heightened public interest in the side-effects of drugs, one might very well hesitate to administer tablets of this kind. Clearly, it would be only too easy for a woman who developed a pregnancy complication, in no way attributable to the tablets, to try to blame them just the same. There is, moreover, a risk that the withdrawal bleeding following the use of the tablets in a woman with secondary amenorrhoea could be interpreted by her as an interruption of pregnancy; again she might want to blame the doctor. It is to be remembered that the cases in which a pregnancy diagnosis test is clinically most useful are those in which there is abnormal bleeding, and it is precisely in these cases that the hormone test of pregnancy cannot be used. One cannot, therefore, help feeling a certain amount of reluctance in advocating the use of this test in patients where the diagnosis can probably be made firmly on clinical grounds, even at the expense of waiting a fortnight or so if necessary.

Genetic Factors in Schizophrenia

Q.—*I have a patient whose brother, aged 14, has developed schizophrenia. She is anxious to know if there is any increased likelihood of her children being mentally abnormal. Her mother has a cousin on her father's side who is in a mental institution (diagnosis not known).*

A.—While twin studies show that genetic factors are important in the aetiology of schizophrenia, it is probable that these factors are complex. The empirical risk to half-sibs of schizophrenics is of the order of 7%,[1] and probably a little less for nephews and nieces. The random incidence of schizophrenia is about 1%.

REFERENCE

1 Kallmann, F. J., *Heredity in Health and Mental Disorder*, 1953. Chapman, London and New York.

Treatment of Ankylostoma Duodenale

Q.—*A Jamaican woman was found to have Ankylostoma duodenale during a routine examination for a nursing post. What treatment should she have?*

A.—If an ankylostoma infection is slight and the patient has no anaemia, the infection is sometimes ignored. However, as it causes a loss of iron through bleeding from the intestine, even though that loss may be small, it is usually best to attempt to expel the worms. It may not be possible to expel them all with one or two courses of treatment, but their number will be brought down to a level at which residual infection is insignificant. The drug which combines optimum therapeutic efficiency for this purpose with minimum toxicity is bephenium hydroxynaphthoate ("alcopar"). To adults it may be given in doses of 5 g., suspended in a little water; it is preferably given in the morning on an empty stomach and followed in half an hour with a saline purge to expel dead or paralysed worms. A cheaper but more toxic alternative is carbon tetrachloride, which to adults may be given in doses of 3 ml. emulsified in mucilage, with an otherwise unchanged regime. Tetrachlorethylene may similarly be given in 3 ml. doses. Other drugs used are hexyl resorcinol administered in rice paper cachets in doses of 1 g. It is important not to give this or other drugs for ankylostomiasis in a form in which it may fail to be released in the upper small intestine, where most of the worms are.

Central Heating and Sinusitis

Q.—*I am installing oil-fired central heating. Some of my family have sinus trouble and are peculiarly susceptible to an atmosphere which is over-dry and over-hot. Are they likely to be affected?*

A.—Central heating does not, as a rule, have any untoward effect upon the upper respiratory tract unless, of course, the heating is excessive. For instance, in England, where central heating is usually set to be not more than 65° F. (17° C.), no harm is likely to come to the respiratory tract even in a susceptible person. On the other hand, if the setting for the heat is well over 70° F. (21° C.), as often happens in the United States, then there is a tendency for the nose to get dry and possibly a little crusted. One way of overcoming this, which can be seen particularly in the Scandinavian countries, is to have little containers of water which hang on the radiators. These get hot and the water slowly evaporates. One in each room gives enough humidity to satisfy most noses.

Bacterial Contaminants of Water

Q.—*In a recent report on our water supply it was stated that there were so many coliform organisms and no B. coli. Could you confirm that coliform organisms cover non-pathogenic ones and explain what these organisms are and their significance? For example, is it of serious significance if these organisms are in tap-water in an ice-cream factory?*

A.—The assessment of purity of water supplies depends on a knowledge of many different factors, of which the most important are the origin of the water supply; its chemical constitution; and the fluctuations in its microbiological flora over periods of time in which considerable variations in weather have occurred. Of the microbiological indications of pollution, perhaps the most significant is the presence of faecal organisms such as *B. coli* capable of growing at 44° C., faecal streptococci, and *Cl. welchii*. While it is recognized that these germs are not in themselves necessarily pathogenic, they are useful as organisms of indication of faecal pollution of the water supply, and their presence indicates the possibility that the water in question might be or might become contaminated with intestinal pathogenic bacteria.

The isolation of such pathogens from water is a difficult matter, even with modern selective and enrichment media. In addition to the germs already mentioned, practically all waters contain a wide variety of organisms having differing growth requirements and coming from different sources. Among these are bacteria whose natural habitat is in soil and vegetation, the members of the coli-aerogenes group of bacteria, which may gain access to the water without it necessarily having been polluted with sewage. It seems likely that the "coliform organisms" mentioned in the question belong to this group. The water supply referred to there is free from faecal pollution but shows some evidence of soil contamination.

Organisms of the coli-aerogenes group are often accompanied in contaminated water by other non-pathogenic bacteria capable of growing at low temperature and of causing food-spoilage. If the water is from a tap in an ice-cream factory, and provided the sample was collected by

a competent person and examined within a reasonable time of collection, steps should be taken to determine the cause of the contamination and correct it. Even if the public health did not suffer the finished product might do so.

Effects of Swimming on Otitis

Q.—*In what otorhinolaryngological conditions should diving into a swimming-bath be prohibited?*

A.—The main effects of diving as opposed to swimming are those due to changes in pressure. The changes are effected mainly upon the middle-ear cleft via the eustachian tube and on the paranasal sinuses via their ostia. No one with an acute upper respiratory infection should ever dive, and it is to be discouraged in those who show an unusual tendency to recurring attacks of sinusitis and otitis media. In cases of chronic otitis media with perforation the infection is more likely to be reactivated by diving than by surface swimming.

Faded Ishihara Plates

Q.—*Ishihara charts for testing colour vision in school-children appear to fade after a few years. Is this detrimental to the results obtained?*

A.—Undoubtedly fading of Ishihara plates will decrease the accuracy of the test, but, unless the deterioration has been severe, the plates will still be useful for screening purposes. However, it would be advisable to retest any doubtful cases on a new set of plates or by some other method. The reliability of pseudoisochromatic plates is discussed by Sloan and Habel.[1]

REFERENCE

1 Sloan, L. L., and Habel, A., *Arch. Ophthal.*, 1956, 55, 229.

Selective Weed-killers

Q.—*Are there any recorded cases of anaphylaxis or other disabilities caused by the inhalation of selective weed-killers for grass? I understand that many of these contain hormones which might perhaps have a physiological action if inhaled.*

A.—The weed-killers used on grass are normally watered on or applied mixed with a coarsely powdered fertilizer. The chances of direct inhalation are therefore very small. Many of these preparations smell strongly because they contain traces of chlorophenols. The "hormones" present are chlorophenoxy acetic acids which affect the growth of the plant cells but are without any such action on either mammalian cells or whole animals. An alternative and much better name is plant-growth-regulating substances.

It is possible that some of the thousands of people who handle this type of preparation in their own gardens may become sensitized to one or other of the ingredients of such selective weed-killers. However, these chemicals are among those used in the largest quantities in agriculture and they certainly have not gained a reputation as causes of sensitization.

Contact with Rubella in Pregnancy

Q.—*Should women under 12 weeks' gestation who have had rubella receive gammaglobulin if they have been in contact with a case of rubella?*

A.—This is a difficult question to answer, because, first, a patient's history of having had or not having had rubella in childhood may be inaccurate; secondly, the incidence of second attacks of the infection in adults is not known, but that second attacks do occur is becoming known to the lay public; and, thirdly, the amount of gammaglobulin at present available is limited. Gammaglobulin is generally not given to women in the circumstances detailed, but if ample supplies were available many, including myself, would feel that it should be given in order to prevent anxiety and to obviate even a very small chance of the necessity of a therapeutic abortion having to be considered.

NOTES AND COMMENTS

Evidence of Mental Condition in Divorce Cases.—Dr. P. H. ADDISON (The Medical Defence Union, London W.C.1) writes: While not disputing your Expert's opinion (Any Questions?" October 20, p. 1072) that a doctor in charge of "informal" patients may be expected in the interests of justice to give in these cases the bare facts necessary for the petitioner to pursue the divorce, I must point out that it is the doctor's ethical duty first to obtain the patient's consent. In most cases the patient will be rational enough to understand the meaning of consent, but in others the doctor must obtain the consent of the patient's guardian *ad litem*. To obtain the consent of the patient or his representative is not only an ethical duty but also a commonsense precaution. There is no doubt that if a patient could show that his medical adviser had, by breach of professional confidence, brought upon him a loss which could be assessed in money the patient would have a right of action. I realize that should consent be refused the doctor can be compelled to give evidence under subpoena. Justice must be done. But a doctor giving evidence under subpoena is protected. A doctor voluntarily disclosing medical information without the patient's consent is breaking the rule of professional secrecy and is vulnerable.

OUR EXPERT replies: Dr. Addison's interesting supplementary is further evidence of the wide context of the original question on the extent of co-operation which divorce petitioners are entitled to expect from consultants in charge of "informal" patients. My answer still stands that the bare facts necessary for the petitioner to pursue the divorce should be given. I do agree that whenever the patient is rational enough to understand the meaning of consent, or has a guardian *ad litem*, consent is a desirable protection. I would not go so far as to say that the doctor who without consent gives no more information than he can be compelled to give on subpoena would be liable to the patient in damages.

Sudden Immersion in Cold Water.—Dr. R. THOMPSON (Pinner, Middlesex) writes: With reference to the reply to the question on this subject ("Any Questions?" November 17, p. 1342), it is I think generally recognized that the dangers of sudden immersion in cold water can be almost entirely obviated by a preliminary douching of the head and neck before diving into or entering the sea or swimming baths. This is due to the fact that sudden immersion of the body, especially the head and neck, in cold or even lukewarm water may cause acute respiratory embarrassment (or even apnoea) with the grave danger, even in strong swimmers, of a sudden inhalation of water and further embarrassment, apnoea, or panic. The head and neck and face should be thoroughly douched until breathing is completely easy and regular.

OUR EXPERT replies: This is indeed sound advice, but it is by no means certain that all cases of death from sudden immersion in cold water are due to the inhalation of water following respiratory embarrassment. Experimental immersion on volunteers in cold water has resulted in cardiovascular changes without such inhalation. Facilities for cold douching may not always be available and would rob the plunge of its invigorating stimulus. One cannot imagine this practice being introduced between the steaming-hot phase of the sauna bath and the dive into the ice-cold fjord.

Correction.—In "To-day's Drugs" of December 8 we stated incorrectly that triacetyloleandomycin was not marketed in the United Kingdom. It is in fact on the market under the name of "evramycin" (Wyeth).

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: *Aitiology, 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 Manager, B.M.A. House, Tavistock Square, London W.C.1 (hours 9 a.m. to 5 p.m.). TELEPHONE: EUSTON 4499. TELEGRAMS: *Britmedads, 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.