ANY QUESTIONS?

We publish below a selection of questions and answers of general interest.

Oral Contraceptives and Carbohydrate Metabolism

Q.—*Do oral contraceptives have any effect on carbohydrate metabolism and on the insulin requirements of diabetics? If so, what is the effect and what is its mechanism?*

A.—Wynn and Doar[1] reported minor abnormalities of glucose tolerance in approximately 20% of people taking a variety of oral contraceptive preparations. They suggested that the effect was similar to that found in corticosteroid diabetes and during pregnancy. The insulin requirements of a diabetic might therefore be increased on occasion, but the effect is not likely to be very great.

REFERENCE

1 Wynn, V., and Doar, J. W. H., *Lancet*, 1966, 2, 715.

Scleroderma

Q.—*What is known about the aetiology and pathology of scleroderma, and is there any treatment?*

A.—The term scleroderma is used for two quite distinct clinical entities: morphoea, characterized by the transient appearance of sclerodermatous plaques without any evidence of systemic involvement, and systemic sclerosis, one of the major generalized collagen-vascular diseases with sclerodactyly and widespread sclerodermatous changes secondary to peripheral ischaemia.[1]

With the exception of linear morphoea, which may affect by direct extension the underlying tissues of the skull and limbs, morphoea is a benign and self-healing disorder. There is recent experimental and clinical evidence that the chelating agent penicillamine is of benefit in this condition by interfering with the excessive formation of dermal collagen.[2,3] An initial dose of two capsules (300 mg.) t.d.s. of penicillamine for one month with gradual reduction of the dose to one capsule (150 mg.) on alternate days is effective in most patients.

Treatment of systemic sclerosis should always be preceded by a full investigation of the renal, respiratory, and alimentary systems. Treatment with oral corticosteroids is disappointing unless they are given in high dosage during periods of rapid progression of the disease. Apart from clinical assessment, frequent repetition of pulmonary function tests is a useful guide to progress. The often grossly impaired peripheral blood flow, with digital ulcers, sclerodactyly, and widespread sclerodermatous changes, can be improved by infusions with low molecular dextran, two to six bottles being given at the rate of one bottle in 12 hours. This treatment has to be repeated every four to six weeks during the winter and every two to four months during the summer.[4]

REFERENCES

1 Ingram, J. T., *Brit. J. Derm.*, 1964, **76**, 238.
2 Nimni, M. E., *Biochim. biophys. Acta (Amst.)*, 1965, **111**, 576.
3 Harris, E. D., and Sjoerdsma, A., *Lancet*, 1966, 2, 996.
4 Holti, G., *Brit. J. Derm.*, 1965, **77**, 560.

Shampoos in Seborrhoea

Q.—*Is long-continued use of a shampoo of either cetrimide or a coal-tar preparation with hexachlorophane contraindicated in cases of seborrhoea?*

A.—The prolonged application of any chemical to the skin involves a risk of inducing allergic sensitization. Tar, hexachlorophane, and cetrimide are all potential sensitizers but relatively feeble ones. The use of these substances in scalp preparations can be regarded as safe. Used in this way they very rarely indeed induce allergic dermatitis.

Diphtheria Immunization of Nurses

Q.—*Does a prospective nurse require a full course of immunization against diphtheria if the Schick test is positive? If it is negative, what is the best method and preparation to use?*

A.—Schick-positive nurses should be given a full immunizing course of diphtheria toxoid consisting of either two injections of P.T.A.P., 0.2 ml. and 0.5 ml. respectively, or three 0.5-ml. doses of T.A.F. with an interval of not less than four weeks between injections. P.T.A.P. is a more potent antigen than T.A.F., and is therefore preferred despite its tendency to cause undesirable local reactions.

A negative Schick reaction is generally regarded as indicative of immunity to diphtheria, but this immunity is not always absolute and may be occasionally overcome by heavy infection of the gravis type. Prospective Schick-negative nurses should therefore be given a single booster injection of a diphtheria toxoid, preferably 0.2 ml. P.T.A.P.

Nurses with pseudo-positive Schick reaction are prone to react violently to diphtheria toxoids, but since they are immune to diphtheria they do not require further immunization.

Reaction of Triple Antigen

Q.—*Is it better to begin a course of triple antigen at the age of 3 months or of 6 months, when the risk of side-effects is less?*

A.—There is little evidence to support the view that side-effects to triple antigen are reduced by starting a course of immunization at 6 months instead of 3 months.

In a recent report on reactions to combined vaccines contained killed *B. pertussis*[1] it was stated that 23 of the 24 infants who had severe reactions to the first dose of *quadruple* vaccine (which included trial batches of vaccine) were under 6 months of age, though there were almost equal numbers of participants below or over 6 months. On studying the report further, it can be deduced that three of the six children who had severe reactions to second injections were over the age of 25 weeks, but the age distribution at the time of second injections is not known.

With regard to reactions following *triple* antigen, only two groups of sixty were immunized. The purpose of the study was to compare the incidence and severity of reactions produced by two manufacturers' vaccines. Six children aged 18 to 21 weeks had severe reactions, but it is possible that the study was confined to infants of this age.

These studies do not provide adequate evidence to justify changes in existing immunization schedules. Such changes should not be considered on the grounds of reactions until results are available on direct comparative trials in 3- and 6-months-old infants.

REFERENCE

1 Haire, M., Dane, D. S., and Dick, G., *Med. Offr*, 1967, **117**, 55.

Stability of Hyoscine

Q.—*Do tablets of hyoscine keep their properties over long periods, and after, say, seven years could their strength and safety be relied on?*

A.—Hyoscine may be present in proprietary tablets either as the base or as a salt, usually the hydrobromide. In either case the substance is reasonably stable. Solutions of the salts can, for example, be sterilized by autoclaving.

If the tablets have been stored under the official conditions—protected from air and light in a cool place—they should retain their strength for several years, possibly as long as seven. Most pharmacists, however, regard about five years as the maximum shelf-life of any medicine.

There are unlikely to be any toxic products in tablets stored for seven years, but there may be some physical deterioration of the tablets.

Warmed Air and Asthma

Q.—*Is central heating by way of warmed air circulated through ducts likely to aggravate asthma and upper respiratory tract allergic conditions? Some asthmatics complain of this form of heating and think that dust and allergens may be circulated with the air.*

A.—I know of no evidence that central heating by warmed air circulated through ducts is likely to aggravate asthma or upper respiratory tract allergic conditions. It has been suggested that some asthmatics are better when the absolute level of moisture in the air is high, and it is possible that excessive drying of the air might lead to deterioration.

Treatment of Cataract

Q.—*Have injections of dilute hydrochloric acid any role in the treatment of cataract?*

A.—I know of no medical treatment which has been proved to have any value in the treatment of senile cataract, and I have no knowledge of the use of hydrochloric acid for this purpose.