ANY QUESTIONS?

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

Diagnostic Significance of Thyroid Antibodies

Q.—A patient with a goitre and enlargement of the left lateral lobe is reported to have thyroid antibodies as follows: result—strong; titre = 2,000,000. What is the significance of this report?

A.—Thyroid antibodies can be of three different kinds reacting with three separate autoantigens: (1) thyroglobulin; (2) another protein in the colloid; and (3) the cytoplasm of thyroid cells. Only thyroglobulin antibodies detected by the highly sensitive tanned-red-cell test (T.R.C.) give titres of several million. Hence the report refers to thyroglobulin antibodies only.

High titres of these antibodies are usually found in patients with the fibrous variant of Hashimoto’s thyroiditis. However, the patient we are concerned with has an enlargement of the left lateral lobe and therefore is not typical of this disease, in which the goitre is more often symmetrical, since it affects the entire gland.

When the goitre is one-sided it is most important to exclude the possibility of thyroid cancer. For this it is essential to evaluate the clinical data and antibody results in conjunction with radioiodine uptake tests, particularly the distribution of the isotope in the goitre as shown by scintigraphy. The majority of thyroid cancers take up little or no iodine and will show up as a cold nodule in the scintigram, whereas in Hashimoto’s disease the iodine uptake usually follows the outline of the palpable swelling.

The majority of patients with thyroid malignancy give negative results in all tests for thyroid antibodies, but in about 12% of cases high titres are obtained with the T.R.C. test. Therefore to differentiate thyroid cancer from thyroiditis the complement fixation test (C.F.T.) for cytoplasmic antibodies is much more useful, since high titres (1/64–1/1,000) are characteristic of Hashimoto’s disease but are practically never found in thyroid cancer.

The differential diagnosis in the present patient lies between thyroid carcinoma and Hashimoto’s disease. She is unlikely to be suffering from a simple colloid nodule or a thyroid cyst, since these conditions are not associated with T.R.C. titres of 2 million unless the remaining part of the gland is affected by an active autoimmune thyroiditis process.

Reflexes and Muscle Tone in Cerebral Palsy

Q.—Can increased reflexes with an extensor plantar reflex response on the affected side of the body occur with normal tone in both limbs on the same side in a child with cerebral palsy?

A.—It is quite possible for the effects of cerebral damage in a child to be reflected in changes in reflexes without disturbance of tone on ordinary neurological examination. Anomalies of the pyramidal syndrome are quite common in children with infantile hemiplegia, and it is particularly common to find that though there may be marked disturbance of function with increase in tendon reflexes the abdominal reflexes are preserved and the plantar reflex flexor. The prime evidence of disorder of the pyramidal system is disturbance of function, and disorders of tone and of reflex response simply constitute supporting evidence.

Malaria in N. Africa

Q.—Would it be advisable for a person taking a short holiday in Tunisia to take prophylactics against malaria?

A.—In the absence of information on the route to be taken to Tunisia and the extent of travel while there, the answer is that it is probably advisable for the person to take a malaria suppressive. This may consist of proguanil 100 mg daily or chloroquine 400 mg. weekly, and should be started two weeks before leaving this country.

Diphtheria and Tetanus Vaccines

Q.—I have given a 15-year-old boy who was immunized in infancy against diphtheria but not tetanus a dose of D.T./vac. I now understand that the diphtheria component of this vaccine might reduce or prevent any response to the tetanus component. What immunization schedule should I now adopt for this patient?

A.—It is certainly possible in view of the previous immunization history that the dose of tetanus vaccine administered as D.T./Vac may not have produced an entirely satisfactory response. The recommended procedure is therefore to give a full primary course—namely, two doses of adsorbed tetanus vaccine (Tet/Vac/P.T.A.H.) spaced six to twelve weeks apart. A third dose should preferably be given some six to twelve months after the second.

Brown or White Sugar?

Q.—What virtue has brown sugar over white?

A.—The virtues of the various forms of brown sugar are mainly gastronomic, and are only apparent when the candy-like taste of these impure forms of sucrose harmonize with the foods or drinks with which they are consumed. The impurities associated with the brown colour are held only on the surface of the sugar crystals, and may readily be washed off with a little cold water to leave colourless crystals of more or less pure sucrose.

The impurities doubtless provide small amounts of iron, potassium, and other minerals, and possibly traces of vitamins of the B complex. The contribution towards the body’s total requirements of these nutrients which could normally be supplied by brown sugar, however, is trivial. There therefore seems little justification to ascribe any particular dietary virtue to brown sugar.