Tests for Lactose Malabsorption in Adults

SIR,—In your leading article, “When Does Lactose Malabsorption Matter in Adults?” (17 May, p. 351) a review of the methods introduced for the diagnosis of lactose intolerance was presented, and included broad screening tests such as stool pH, symptomatology after lactose ingestion, lactose-barium meal, and carbon-14 breath test as well as the more widely used 50-gram oral lactose tolerance test with measurement of the blood glucose rise—a technique requiring multiple blood samples. “Final proof of the diagnosis has to be obtained by measuring the lactase activity of a jejunal biopsy specimen.” No mention was made in the leader of analysis of breath hydrogen (H2) by gas chromatography following lactose ingestion. Callowway1 and Levitt2 first showed that breath H2 concentration rises when malabsorbed lactose is fermented in the large bowel, and they suggested that breath H2 may be used as a measure of lactose malabsorption.

We have recently completed a study3 comparing intestinal lactase activity with symptomatology, blood glucose rise, and breath H2 production in a group of patients with diarrhea. We found breath H2 to be as reliable as the blood glucose and better than symptoms in the diagnosis of hypolactasia. Breath H2 does not involve urticaria or venepunctures it is more acceptable to patients and it is also easier to apply from the technical point of view. Furthermore, our experience agrees with that of Isokoski4 and disagrees with your suggestion that symptomatology may be used as a reliable test of hypolactasia.

We would also argue against the suggestion that intestinal lactase activity is the final proof of lactose malabsorption. For example, in the coeliac disease jejunal lactase activity may be reduced but lactose absorption still occurs further down in the ileum. Thus the sugar can be said to have been malabsorbed only if it passes through to the caecum, whereupon its subsequent fermentation with evolution of H2 may truly be claimed as a measure of its malabsorption. We are, etc.,

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Arthritis of Hepatitis: the Tourniquet Test

SIR,—A serum-sickness-like illness manifesting itself as migratory polyarthritis, fever, and urticaria has been recognized as a prodromal phase of hepatitis both positive and negative for hepatitis B surface antigen (HBsAg). 1,2 Fernandez and McCarty3 reported a patient with hepatitis and arthritis in whom severe urticaria developed in the arm distal to the point of application of a tourniquet. We report here (1) the occurrence of three different skin lesions and (2) the effect of the tourniquet test in a documented case of HBsAg arthritis.

A 16-year-old non-addict male presented with a five-day history of malaise, headache, fever, and polyarthritis. The prothrombin time was normal and metacarpophalangeal joint swelling was noted. Urticating and urticarial developed two days later. On examination, all the affected joints were warm, tender, and hot. A scaly erythematous macular rash was evident over each of these joints. Giant urticarial lesions were present over the upper extremities. No joint barrier was present over the left knee. There was no rash over the costal margin, soft, and non-tender. Initial studies revealed a normal blood count, platelet count, E.S.R., and urine analysis. When the rise in serum bilirubin (total 22.2 μmol/l [1.3 mg/100 ml]), direct 7.7 μmol/l [0.45 mg/100 ml]) and SGOT and SGPT (400 and 450 Franklin units respectively) were available arthritis of hepatitis was considered. Further studies showed the presence of HBsAg in the serum, C3 600 (normal 900-1500 μg/l) and C4 100 (normal 100-510 μg/l). Haemoglobin Ab could not be detected in the serum. Total serum proteins, antinuclear antibody, L.E. cell, rheumatoid factor (1+), V.D.R.L., and heterophile antibody tests, and creatine, phosphokinase, and aldolase activities were normal or negative. He became jaundiced one week after the onset of the arthritis and shortly afterwards a petechial rash was noticed over the chest. The serum enzymes were normal on the 12th day of the illness (SGOT 1060, SGPT 2750 F.U.). When the tourniquet test was done itching developed distally but no skin lesions appeared. The patient was admitted 50-100 mg diazepam. One month later after the jaundice has appeared, serum hepatitis B antibodies could be demonstrated and the C3a and C4 levels became normal.

The acute onset of polyarthritis, fever, and urticaria along with hypocomple-

mentemia and HBs antigenemia is typical of HBsAg arthritis. Besides urticaria, erythema marginatum and popular, macular, and petechial lesions have been described.3 Our patient is of interest that three skin lesions developed. Scaly macular lesions over the involved joints of the hands, mimicking the lesions of dermatomyositis, and giant urticarial lesions limited to the upper extremities were both present in the pre-icteric phase, and when jaundice appeared petechiae developed.

The arthritis of HBsAg hepatitis is thought to be due to the deposit of HBs Ag-anti-HBsAg complexes in the synovium.1 The urticaria, which is an integral part of this syndrome, could also be due to such deposition in the dermis, with subsequent liberation of histamine. The induction of urticaria (or merely itching as in our case) by application of a tourniquet might be helpful as an early diagnostic sign in arthritis of hepatitis. We recommend that this simple test be performed in all cases of arthritis of hepatitis to appreciate its reproducibility and significance.—We are, etc.,

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3 Schumacher, H. R., and Gall, E. P., American Journal of Medicine, 1974, 57, 655.

SI Units

SIR,—Dr. G. H. Hall (31 May, p. 502) complains that the opinion of clinicians has not been sought before a directive to adopt SI units in the N.H.S. was issued. Quite understandably he accuses "many pathologists" of wishing to introduce this change. He, and doubtless many others, may be interested to know that neither the main body of pathologists, nor biochemists, have been given chance to vote upon the topic by any properly conducted democratic procedures. Doubtless everybody thinks that because other specialties and other hospitals are changing to the new units, they too must conform. It is the lack of an opportunity for us to express a collective opinion that allows us to be conquered.

I carried out a poll of opinion within this hospital department. Each member of the staff was asked to give his own personal opinion on the virtue of changing over to SI units. The result was as follows: in favour, three; against, four; “don’t know,” three; “the present 50-pound factory and should be reconsidered,” 13. Most individuals felt that they would have liked an opportunity to express an opinion and were dissatisfied by the manner in which the directive to change had been given. Those who did not know had not studied the proposals.

There is a political decision to introduce metric units throughout the U.K. but how can this be interpreted in terms of units as applied to laboratory medicine was studied by a working party. Perhaps the current disagreement is not with the policy of metrication but rather with the interpretation of this adaptation. The
Little and Big Bellyachers

SIR,—Many little bellyachers do grow up to become big bellyachers (leading article, 31 May, p. 459) because the cause of the bellyache is not treated.

All the bellyaches presenting initially as recurrent abdominal pain or irritable colonic syndrome in children and later as dyspepsia associated with hiatus hernia, peptic ulcer, and/or gall bladder disease, and/or diverticulosis, and/or maturity-onset diabetes in adults are different syndromes of fat intolerance, a disorder of metabolism caused by excessive intake of fat.2 Fat intolerance is the consequence of family patterns of feeding; therefore it is not unusual to find that the mother and father and other relatives of the little bellyacher are big bellyachers. The disorder is not inherited; it is due to learned feeding habits within the family and is a self-inflicted disease.

Sympathetic, psychiatric, treatment, or drug therapy is not a cure for the metabolic disturbance giving rise to fat intolerance. The symptoms of the different syndromes and the metabolic abnormality can be cured by adhering strictly to the "fat free diet" as defined in my paper.3 If this is done in the little bellyacher, he or she will not become a big bellyacher. There is now a series of 100 children and young adolescents in the Plymouth Clinical Area, symptom-free and developing normally and healthily on this diet. Many of these patients had failed to respond to the usual treatment for emotional disturbance or for irritable colonic syndrome. Many of my 2000 adult patients who are now cured of their big bellyache by strict adherence to the "fat free diet" started as little bellyachers. They continued to be bellyachers, off and on, all their lives until they adhered to the "fat free diet." I support the statement in the leading article that there is a need for research and therapeutic trials. Big and little bellyachers are cured and can be prevented by reverting to a natural feeding habit. It is time that our profession looked dispassionately at the evidence and established the truth by means of appropriate research.—I am, etc.,

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Management of Depression

SIR,—In his excellent paper on the management of depression (17 May, p. 372) Dr. G. W. Ashcroft suggests that "adverse environmental circumstances" may prevent an adequate response to antidepressants or electric convulsion therapy. It is also important to recognize those physical illnesses such as hypothyroidism and vitamin B12 deficiency which may pose as a resistant depression. The diagnosis is easily missed when psychiatric symptoms predominate and complaints such as weakness, anorexia, and constipation are misinterpreted. With specific treatment the improvement in the mental state is often dramatic.—I am, etc.,

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Screening Methods for Covert Bacteriuria in Schoolgirls

SIR,—May I comment on the interesting paper by Dr. Bridget Edwards and her colleagues (31 May, p. 463). I agree entirely with their observation that the MacConkey surface of the Oxiid dip slide suppresses the growth of the organisms which reveal contamination, whereas these organisms grow well on the CLED surface. Use of the MacConkey surface, therefore, results in a number of false positive interpretations. For this reason that, for the past three years, we have been using an Oxiid dip-slide coated on this side only with CLED agar; this medium supports growth of the known urinary pathogens, including micrococccus 3, which, though commoner in young women, does occasionally cause infection in children, both boys and girls. Contamination is induced by a mixed growth which includes the vaginal and perineal commensals.

Originally we used the single-medium dip-slide for immersion in a midstream specimen; more recently we have been using the dip-stream method for follow-up of boys who have had urinary infection.3 The dip-stream method, especially in the patient’s home, is likely to be more reliable if inoculation of only one medium is required. At present the manufacturers supply these slides at the same price as those coated with two media; a more widespread demand for a single-medium slide, however, can reasonably be expected to reduce the cost still further of the dip-stream method.—I am, etc.,

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Pay Beds and Professional Freedom

SIR,—I write in full and firm support of Mr. D. E. Bolt (7 June, p. 556). He lucidly expresses a point of view which is held by a large and growing number of hospitals and hospital doctors, including many junior doctors. In the interests of the public and of the N.H.S., no less than those of the medical profession itself, it is vitally important to preserve pay beds and other facilities for private medical care in our hospitals. I have no doubt that consultants would be right in resorting to "work to contract" wherever pay beds are unjustly threatened or closed. Moreover, it would be wise for us to use every means in our power to resist any vindictive legislation which was pressed upon Parliament.

Mr. Bolt expresses the fear that his views are "without significant support amongst the leadership of the profession." Whether he is referring to the B.M.A. negotiators or the Hospital Consultants and Specialists Association I do not know, but the profession can do no reminding that, at its meeting on 15 October 1974, the Joint Consultants Committee (representing all the royal colleges and faculties, the B.M.A., the Pharmaceutical Association, and the junior doctors) clearly pleaded for support for the preservation of private facilities both within and outside the N.H.S. (26 October 1974, p. 241).

Writing as a member of both the B.M.A. and the H.C.S.A. may I emphasize how vital it is that the two organizations should work closely together? Interminable strife can only seriously impair the potency and effectiveness of the profession in their present confrontation with a particularly doctrinaire and intransigent Secretariat of State. The enabling Act of 1946 always envisaged the need for a monopoly in medicine; it is a pity that this has taken more than a quarter of a century for a majority of hospital doctors to recognize its dangerous implications for professional freedom.—I am, etc.,

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Junior Hospital Staff Contract

SIR,—I am amazed at the vast number of letters in recent weeks which express reservations about the proposed 40-hour contract for junior hospital staff. Are their authors not those who, until two months ago, were giving at least vocal support to officers of the Hospital Junior Staffs Group Council? Who are in fact happy to allow their conditions of work to go unchanged, and in the absence of the threat of a legal action, are even less likely to take part in any form of sanction to improve their lot? Who in fact cannot see past the ends of their noses and visualize the Health Service in five years' time if things continue along their present course?

The 40-hour week, as I see it, is not just a method of increasing remuneration, and it certainly is not intended to reduce the quality or quantity of care given to the patient. It is to improve our ability to function as doctors practising medicine and therefore to use the medical manpower resources that are available as efficiently as possible.

Junior and senior medical staff will always complain while their patient:non-patient time ratio is low as long as it is not recognized that they work and will continue to work long hours. Freedom of the practitioner is an attitude of mind and not a number of hours on a piece of paper. The doctor who does stay on after hours does not do so to earn time off work. He has already worked 100 hours or 40 hours. Is the argument of some that we need to be told when to work?

We must give full support to efforts that will make our jobs more clinical. Hopefully the more time we are thus able to spend with the patient, then the more he will appreciate what we are trying to do.

For goodness sake let the administrators