sleeves and press the elbow on an ink pad while resting the head on the hand. This is a posture commonly adopted by people sitting in a chair or at a desk. When the elbows were examined it was seen that the skin over the olecranon was stained in all, and also the skin over the medial epicondyle in some. In none was the skin over the ulnar nerve marked. A telephonist with an ulnar palsy was asked to hold a telephone to his ear and mouth while resting his elbow on the ink pad. When he had taken up his position it was clear that he had strongly adducted and externally rotated his arm so that the medial epicondyle and the ulnar nerve were lifted clear of the pad.

I learned from Feindel and Stratford² that when the forearm is flexed the aponeurosis of the cubital tunnel compresses the nerve. I hoped by further observations to come to some conclusions about prognosis but failed since, on first principles, the prognosis would depend on the duration and degree of forearm flexion, and neither could be estimated with accuracy. Unfortunately the need for brevity prevents a description of the 15 patients. Each had individual points of interest.

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¹ Gowers, W R, *Diseases of the Nervous System*, vol 1, p 88. London, J and A Churchill, 1892.

² Feindel, W, and Stratford, J, *Canadian Journal of Surgery*, 1958, 1, 287.

Recommended terminology of urinary tract infection

SIR,—The report of the Medical Research Council Bacteriuria Committee (22 September, p 717) makes some useful recommendations towards clarifying the nomenclature of inflammatory disease of the urinary tract. The proposal that the terms urethral syndrome and chronic pyelonephritis should be no longer used is most welcome. The main problem that the committee had to face was the difficulty in reconciling clinical, bacteriological, pathological, and radiological findings; and it might have been better to have established clear terminologies in each independently, as was done with the radiological terms. Clinicians certainly need a clear and unambiguous nomenclature for the conditions they regularly encounter.

The suggestion that "cystitis" should be discarded and replaced by the "frequency and dysuria syndrome" would be more helpful if dysuria had been defined. Its definition (the *Shorter Oxford English Dictionary* and *Chambers Twentieth Century Dictionary*) is "difficult or painful micturition," which is too imprecise for scientific use—the more so as it would fail to distinguish between the various different pains associated with micturition. The report defines urinary tract infection and bacteriuria separately, but does not seem to me to make a clear distinction between them. Infection, strictly speaking, is a tissue phenomenon, whereas bacteriuria signifies the presence of bacteria in urine. The distinction is important, because it is quite possible to conceive of tissue infection without bacteriuria and vice versa. Urinary tract infection should therefore not be used as a synonym for significant bacteriuria, as appears to be implied under the heading "Criteria for cure."

The clinician would find difficulty with "chronic interstitial nephritis," which is to

replace "chronic pyelonephritis," because it is defined in pathological and aetiological terms only. He has usually no access to pathological findings in his renal cases and may not be able to decide what clinical entities come under this heading. The section on response to treatment is presented in purely bacteriological terms. One is bound to reflect that a woman who loses her bacteriuria but retains her symptoms is, from a clinical point of view, not cured at all. Significant bacteria should be considered as only part of the evidence when assessing a particular patient.

In a general practice here 10% of my work for the past 33 years has been concerned with inflammatory disease of the urinary tract. Only a minority of these patients have significant bacteriuria and the majority would therefore be included under "abacterial cystitis" or "chronic interstitial nephritis." No guidance is offered in respect of criteria for cure in these cases, which constitute the bulk of one's clinical material.

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SIR,—In the Medical Research Council report "Recommended Terminology of Urinary Tract Infection" (22 September, p 717) the term abacterial cystitis is suggested as indicating "a syndrome consisting of frequency and dysuria in the absence of bladder bacteriuria. The use of the term 'urethral syndrome' is not recommended because there is no evidence of urethral disease in most of the patients."

In actual fact there is no evidence of bladder disease in most of the patients. Why "cystitis"?

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University examinations and the medical student

SIR,—Dr D McCracken (22 September, p 730) provided a searching and sympathetic account of his long experience of examination anxiety. He did not differentiate between students taking different courses but one wonders whether medical students may not be subject to special stresses under the prevailing system. The scathing criticism of Thomas Huxley, in his rectorial address in Aberdeen in 1874, of a system that produces students "who work to pass, not know. They do pass, and they don't know" still applies. Besides needing to *know* what have been called "the stories of basic science," more importantly in the long run the student needs to *feel* (medicine as an art) and to *do* (medicine as a craft).

From raw material to finished product the output of the medical school is not being matched to its avowed purpose—to train doctors. The selection of those with the best marks from school is inappropriate. The preclinical-clinical layering of instruction, including various token concessions, fails to serve the best interests of any of the three aspects of medicine. The imposition on some of our brighter and best-motivated young adults of the sole obligation, throughout five of their best years, to pass examinations is a grave insult to their intelligence and antipathetic to the spirit of doctoring.

One may wonder that so few appear to crack under the strain, but many do later when the die is cast.

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Practical problems with the Clinitest

SIR,—Drs P A Aspinall and A R Hill reported (1 September, p 552) that both diabetic and normal subjects misread reducing sugar assays using Clinitest reagent tablets. It was stated that colours produced with "dextrose solutions" tended to be matched with colour blocks which were one or two higher than expected.

We understand from Dr Aspinall that the tests were performed using simple solutions of dextrose in tap water, that the same solution was used throughout the period of several weeks of testing, and that this solution was standardised by polarimetry. It is important to emphasise this use of a solution of dextrose in water because the Clinitest is specifically formulated for the assay of reducing sugars in urine, in the presence of other urine constituents, and at the specific gravities found in natural urines. In the absence of some of these other constituents different results will inevitably be obtained, and therefore the tests performed by Drs Aspinall and Hill are not relevant to the use of Clinitest in urine.

It has been confirmed in three laboratories that such tests carried out in water tend to be read one to two colour blocks higher than tests on the same concentration of glucose in urine. Moreover, the colours given by solutions of glucose in water are noticeably redder than the corresponding colours given by glucose in urine at the higher concentrations and must be expected to show some degree of metamerism throughout the range. It is not surprising therefore that subjects in the study of Drs Aspinall and Hill found difficulty in matching the colours yielded by solutions of glucose in water with colour blocks designed for use with urine. Nor is it surprising that these difficulties were accentuated in patients already suffering from a degree of impairment of colour vision. Patients suffering from certain defects of colour vision may experience difficulty in matching Clinitest colours even when the test is carried out correctly. Three of the papers cited by Drs Aspinall and Hill¹⁻³ report that such patients may be adequately controlled by blood tests using Dextrostix and one of the Ames meters or by using Diastix, which can be matched by comparison of hue.

It is clearly desirable that the ability of patients to carry out any self-testing procedure should be adequately checked at the time testing is initiated and at suitable intervals thereafter. This checking should include the ability to match colours correctly as well as the retention of adequate dexterity to carry out the test. The suggestion that diabetic patients should be regularly tested for impairment of colour vision is, we believe, a valuable one. However, it must be noted in interpreting the results that Thompson *et al*¹ reported that only moderate-to-severe deficiency led to difficulty in interpreting the Clinitest.

The Ames Division pioneered the development of convenient tests by which diabetic patients could control both their own urinary sugar levels and their blood glucose levels.