Trauma to the Urinary Tract

SIR,—Mr. J. P. Mitchell's paper (5 June, p. 567) succeeds admirably in its declared object of seeking to clarify and simplify this variegated subject. The more conservative approach to kidney trauma has truly emerged in the last two decades; nephrectomy is rarely the method of choice in its treatment. Mr. Mitchell rightly postulates a quandary for the surgeon—the decision confronting him whether or not to operate, and when—if he does so.

In addition to the more usual, there is one little-recognized type of renal injury which provokes particularly anxious deliberation both in diagnosis and in treatment. This is when a direct blow to the region causes extensive damage to the parenchyma but is unaccompanied by any cortical tear; in other words formation of a subcapsular haematoma. With no tension-avoidance allowed by any superficial rent there is clinically persisting pain and tenderness in the renal angle. There may be no haematuria. When some 48 hours have elapsed intravenous pyelography will show distortion of the caliceal pattern. It is possible that conservation may succeed and the haematoma be absorbed. But if no relief to the intrarenal tension is forthcoming then complete destruction of the organ is also feasible. This comes about by a process of autolysis which can take a span of six months; the kidney may be transformed into an inert bag of pultaceous, macerated parenchyma admixed with blood elements. Infection can readily supervene under these circumstances. The decision whether such a closed injury should be decompressed by incision in the capsule is one calling for a high degree of experience and judgement. On two occasions I have had the unhappy experience of removing such functionless remnants and because of that I could be biased towards intervention if I felt reasonably assured of the precise diagnosis.

I also wonder if these two defunct kidneys had been left alone would they have become, after an intermediate hydrocalycosis stage, the shrunken pathological specimens like the one itemized in Mr. Mitchell's follow-up of 56 cases? Was his the final remnant of an autolytic process?—I am, etc.,

DANIEL LAMONT

Grimsby General Hospital,
Grimsby, Lancs

Radiologists in Liverpool

SIR,—Following the "Contemporary Themes" article by Professor A. G. W. Whitfield and others on "Radiological Training and Staffing in the Birmingham Region and Elsewhere" (29 May, p. 514), I have now analysed the consultant radiological appointments made in the Liverpool Regional Board hospitals during the ten-year period January 1961 to December 1970.

Twelve consultant appointments were filled, eleven by locally trained radiologists. Five of the appointees had obtained the Fellowship of the Faculty of Radiologists, with two further consultants obtaining this diploma shortly after appointment. This figure (58%) with the F.F.R. is greater than that of the Birmingham R.H.B. hospitals and is also considerably higher than that of

consultants appointed in Liverpool before the survey period.

At first sight it would appear that the Faculty of Radiologists is being successful in raising the standard of training for consultant posts throughout the country, but it is of interest to carry the analysis one step further. All five consultants appointed with the D.M.R.D. as their only radiological diploma are still working in Liverpool R.H.B. hospitals, though one consultant has changed his appointment. Only three of the consultants appointed with the F.F.R. have remained in Liverpool R.H.B. hospitals. Of the four consultants who have left, two have subsequently been appointed to teaching hospitals in Liverpool and the other two have emigrated to Canada and are now working in Canadian teaching hospitals.

How different is the situation in radiology compared with other branches of the profession. One rarely hears of consultant physicians or surgeons in R.H.B. hospitals changing their appointments, or emigrating overseas to greater financial opportunities. Emigration in these branches usually occurs at senior registrar or registrar levels.

It would be of interest to know if this is the pattern in radiology throughout the country and why such a high proportion of consultants with the F.F.R. leave the regional hospital board posts.—I am, etc.,

J. V. OCCLESHAW

Neuroradiology Department,
Walton Hospital,
Liverpool 9

Treatment of Myasthenia

SIR,—In your "Today's Drugs" article on the treatment of myasthenia gravis (17 April, p. 160) your author states that thymectomy carries a relatively high morbidity and mortality.

I think your author's statistics are out of date. Since the practice was begun several years ago of discontinuing anticholinesterase medication during and in the immediate post-thymectomy period, as well as the routine use of tracheostomy, the mortality in most centres has been quite small.¹—I am, etc.,

SHELDON WOLF

Department of Neurology,
Southern California Permanente Medical Group,
Los Angeles, Calif., U.S.A.

¹ Papatestas, A. E., Alpert, L. I., Osserman, K. E., Osserman, R. S., and Kark, A. E., *American Journal of Medicine*, 1971, 50, 465.

Aortic Aneurysm and Peptic Ulcer

SIR,—In connexion with your leading article on "Aortic Aneurysm and Peptic Ulcer" (16 January, p. 129) it may be of interest that our observations made recently (to be published partly in *Polish Medical Weekly*) show an association between peptic ulcer and generalized arteriosclerosis with renal artery stenosis and hypertension in males in their thirties and forties. We have observed seven males aged 30-48 years with renal artery stenosis, hypertension, and signs of general arteriosclerosis (claudication, diffuse neurological lesions, etc.), in five of whom there was a history of peptic ulcer.

This remark broadens, I hope, the observations made by A. Elkeles¹ about the association between radiological calcification

of the aorta and its branches and gastric ulcer in people over the age of 50.—I am, etc.,

W. WERMUT

Medical Academy, Gdańsk, Poland

¹ Elkeles, A., *American Journal of Roentgenology, Radium Therapy and Nuclear Medicine*, 1964, 91, 744.

Malaria and Sickle-cell Disease

SIR,—The interesting article of Mr. A. Adey and colleagues (22 May, p. 445) corrects a longstanding impression that all sicklers (whether they have the trait or the disease) are protected against severe malaria.

In a 5-year study of 1,391 consecutive sickle-cell disease patients (Table 1) sickle-

TABLE I.—Sickle-Cell Disease Patients Studied

Genotype	Number
SS	658
SC	664
S β thalassaemia	35
SF ^{highgene}	32
SD ^{Punjab}	2
Total	1,391

cell crisis (as defined by experienced workers in this field^{1,2}) severe enough to require admission to hospital occurred in 281 (42.7%) of the 658 Hb SS patients, 211 (31.8%) of the 664 Hb SC patients, 14 (40%) of the 35 Hb S β thalassaemia, 8 (25%) of the 32 Hb SF^{highgene}, and none of the 2 Hb SD^{Punjab} disease patients. Precipitating causes of crisis severe enough to require emergency admission to Korle-Bu Hospital, Accra, included malaria, upper respiratory tract infection, pneumonia, enterocolitis, salmonellosis, urinary tract infection, pregnancy, and miscellaneous ones like trauma, severe exercise, alcoholic intoxication, and heavy rainfall. In 75 (26.6%) of the 281 Hb SS patients admitted in crisis the cause was diligently looked for but not found. The corresponding number of Hb SC patients admitted in whom the cause of crisis was unknown is 62 (29.4%) out of 211. The number of patients with malaria infection (usually mixed, with *P. falciparum* predominating) causing crisis severe enough for admission to hospital is given in Table II for

TABLE II.—Sickle-Cell Disease Patients* Admitted in Crisis with Malaria

Genotype	Crisis with malaria admission		Total
	Yes	No	
SS ..	82 (12.5%) (75.9%)	576 (87.5%)	658 (100%)
SC ..	26 (3.9%) (24.1%)	638 (96.1%)	664 (100%)
Total ..	108 (8.2%)	1,214 (91.8%)	1,322 (100%)

Chi-Square : 31.1 Degrees of freedom : 1

*10 of the 82 Hb SS patients were admitted twice with malaria causing crisis, 2 three times, and 1 four times. Only one of the 26 Hb SC patients was admitted twice with malaria precipitating crisis.

the two largest genotypes. While malaria severe enough to cause serious crisis is common in sickle-cell disease (8.2% of 1,322 patients) it is three times the cause of crisis admissions in sickle-cell anaemia as in Hb SC disease (Table II, column percentages), and whereas 82 (12.5%) of all Hb SS patients were admitted in crisis because of