

and a diuretic. Some of these results have already been reported.<sup>2</sup> In the group taking clonidine and a diuretic, our results are in substantial agreement with those of Dr. Amery and colleagues, the major side effects being dryness of mouth and drowsiness. However in patients taking clonidine, methyl dopa, and a diuretic, we achieved good control (standing systolic  $\leq$  150 mm Hg) in 44 out of 54 patients, while the incidence of side effects was reduced because lower doses were necessary when compared to the group taking clonidine with a diuretic.

These results indicate that the triple drug regimen allows good control of blood pressure with a minimum of side effects and its use would appear to be of some benefit especially in the irritable, nervous, hyper-tensive patient requiring some sedation.—We are, etc.,

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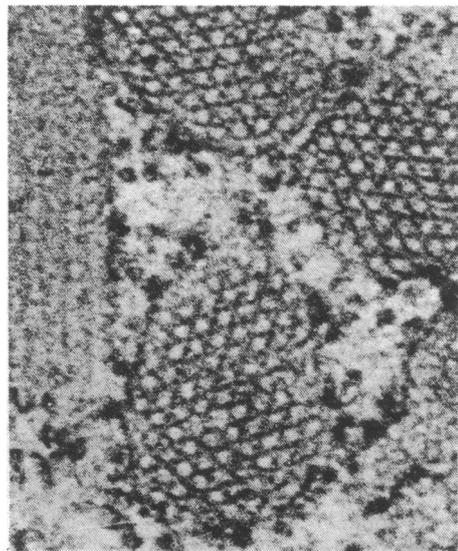
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- <sup>1</sup> Rand, M. J., and Wilson, J., *European Journal of Pharmacology*, 1968, 3, 27.  
<sup>2</sup> Ebringer, A., Doyle, A. E., Dawborn, J. K., Johnston, C. I., and Mashford, M. L., *Medical Journal of Australia*, 1970, 1, 524.

#### Ulcer-related Antigens?

SIR,—Your leading article on the immunoglobulins (21 November, p. 445) and the paper by Dr. D. B. Kaufman and others (p. 463) deal with the particular situation of IgA produced in the salivary glands, bronchi, and intestine; the last is the more thoroughly investigated organ in this respect. We know that each square millimetre of intestinal mucosa contains 352,000 plasma cells making IgA; 51,000 cells that make IgM; 15,000 that make IgG; and 3,000 that make IgD.<sup>1</sup>

Studying with the electron microscope some histological preparations of duodenal



Details of plasma cell in the duodenal mucosa of a patient with duodenal ulcer: vesicles of endoplasmic reticulum filled with proteinic matter with a periodical structure of about 200 Å ( $\times$  107,215).

ulcers taken at operation, I saw in addition to short, misshapen, and rarefied villi indicative of coeliac disease, plasma cells with the endoplasmic reticulum transformed into vesicles filled with proteinic matter with a periodical structure of about 200 Å (Fig).<sup>2</sup>

This finding suggests that the 200-Å proteinic matter could be IgA, and I believe that these plasma cells might be the expression of a local autoimmune situation brought about by ulcer-related antigens. In other words, one might postulate a new type of autoimmunity, being eminently local and bound to local IgA produced by the plasma cells.—I am, etc.,

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- <sup>1</sup> Crabbé, P. A. and Heremans, J. F., *Intestinal Absorption and Malabsorption*, ed. D. H. Shmerling, H. Berger and A. X. Prader, p. 161, Basel, Karger, 1968.  
<sup>2</sup> Sirtori, C., *Gazzetta Sanitaria*, 1970, 41, 408.

#### Xanthinuria Discovered in Population Screening

SIR,—In a population health survey of Busselton, Western Australia,<sup>1</sup> a 54-year-old man was found to have a serum uric acid level of 0.3 mg/100 ml (by modified AutoAnalyzer N13b method). He is in good health and has no history of significant past illness or surgical operation. He has no siblings. His son aged 18 and daughter aged 16 had serum uric acid levels of 6.2 and 5.5 mg/100 ml respectively. There is no family history of renal stones.

Using the more specific method of Klinenberg *et al.*<sup>2</sup> the subject's plasma uric acid concentration subsequently was found to be 0.39 mg/100 ml and plasma xanthine plus hypoxanthine 0.31 mg/100 ml. Without dietary restriction his urine contained 80 mg uric acid and 482 mg xanthine plus hypoxanthine per 24 hour. He declined to submit himself to intestinal biopsy to provide tissue for xanthine oxidase assay, but we consider the chemical features establish this as a further case of xanthine oxidase deficiency to be added to the seven other well documented cases of this rare condition.—We are, etc.,

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- <sup>1</sup> Curnow, D. H., Cullen, K. J., McCall, M. G., Stenhouse, N. S. and Welborn, T. A., *Australian Journal of Science*, 1969, 31, 281.  
<sup>2</sup> Klinenberg, J. R., Goldfinger, S., Bradley, K. H. and Seegmiller, J. E., *Clinical Chemistry*, 1967, 13, 834.

#### Renal Failure and Contrast Media

SIR,—We read with interest the article by Dr. J. McEvoy and others on renal failure after radiological contrast media (19 December, p. 717). We regret that the authors chose to speculate freely on the hazards of excretion urography from their experience of renal failure after renal arteriography and intravenous cholangio-

graphy. Such a practice has already accounted for much of the confusion regarding the dangers of excretion urography. It is quite unacceptable to compare selective angiography with excretion urography, the concentration of contrast medium delivered to the small renal vessels being totally different.

Despite the fact that none of their patients showed any adverse reaction to urography, the authors emphasized the potential danger of high-dose urography in patients with renal failure. Many workers including ourselves have experience of this valuable technique, and there are numerous reports showing no ill effects using modern contrast media provided dehydration is avoided.<sup>1</sup> A recent careful study of renal and hepatic function before and after high-dose urography in patients with impairment of renal and/or hepatic function from four centres in the United States revealed no evidence of nephrotoxicity or hepatic damage due to the contrast media.<sup>2</sup>

It is unfortunate also that no details were given of the doses of contrast media used for the renal arteriographic studies or of the clinical status of the patients during and following the investigation. Before ascribing nephrotoxicity to contrast media alternative causal factors must be excluded. Thus no comment was made on the possible importance of a surgical operation in the genesis of the renal failure in Case 2.

No contrast examination is, however, completely free of hazard, particularly in sick patients, and we would entirely support the authors' plea that "the possibility of adverse side effects in any diagnostic procedure must be weighed against the usefulness of the information it may provide."—We are, etc.,

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- <sup>1</sup> Fry, I. K., and Cattell, W. R., *British Journal of Hospital Medicine*, 1970, 3, 67.  
<sup>2</sup> Davidson, A. J., Becker, I., Rothfield, N., Unger, G., and Ploch, D. R., *Radiology*, 1970, 97, 249.

#### Living it up with Concorde

SIR,—Dr. I. C. Perry (12 December, p. 685) suggests that a visit to any aviation medicine library would satisfy those correspondents, including myself, who query whether safety in the air could be compromised by disturbances in circadian rhythms of air crew.

May I respectfully dissent from this view. The investigations which I and my colleagues in Manchester have made, and the work of many other investigators which we have reviewed, indicates that marked disturbances in circadian rhythms, both physiological and psychological, occur after flights across a series of time zones.<sup>1</sup> I know of no evidence which would suggest that pilots are in some way exempt from these effects, or that crew rosters are at present so arranged as to completely exclude them.—I am, etc.,

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- <sup>1</sup> Conroy, R. T. W. L., and Mills, J. N., *Human Circadian Rhythms*, London, Churchill, 1970.