Solitary Thyroid Nodule

SIR,—We agree with the view expressed in your leading article (10 November, p. 310) that clinically solitary thyroid nodules should be removed surgically because some are malignant. A proportion of benign follicular colloid nodules and papillary and medullary carcinomas can be recognized by fine-needle biopsy, but follicular carcinoma cannot be distinguished from benign adenoma by needle biopsy and here frozen section is also unreliable. Lobectomy provides the tissue necessary for diagnosis and is the definitive treatment for follicular carcinomas, which have a good prognosis.¹

In thyroid cancer we must consider the way the disease behaves and the possible effects of each type of treatment. The behaviour of papillary, follicular, and medullary thyroid cancers, which may present as a solitary nodule, is documented in the clinicopathological classification of Hazard² and Woolner *et al.*,³ which is now widely accepted. Different classifications may confuse; for example, Russell's description⁴ of tumour spread within the thyroid is difficult to interpret because the Hazard-Woolner classification was not used. If it had been, however, the descriptions given place at least 80% of his carcinomas in the papillary group.

Advocates of total thyroidectomy must define their aims since the behaviour of some thyroid carcinomas is remarkably "benign." Total thyroidectomy is more radical than is usually necessary and neither removes the primary en bloc with its lymphatic drainage nor reliably ablates all thyroid tissue as a preliminary to radioiodine treatment. Of its complications, Dr. H. J. Goldsmith (5 January, p. 39) mentions hypoparathyroidism. The incidence of this reported by experienced thyroid surgeons is about 15% after total thyroidectomy and we have recorded that of 12 children operated on in England and Wales in 1962-67, five have hypoparathyroidism, from which one almost died.⁵ The condition is serious and requires life-long treatment so that only if thyroid cancers were more "malignant" might one accept this penalty. In this respect Dr. Goldsmith's analogy with prostatic cancer reflects Crile's view of some of these tumours.¹—We are, etc.,

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¹ Crile, G. Jr., in *Thyroid Neoplasia*, ed. S. Young and D. R. Inman, p. 39. London and New York, Academic Press, 1968.

² Hazard, J. B., in *The Thyroid*, ed. J. B. Hazard, and D. E. Smith, p. 239. Baltimore, Williams and Wilkins, 1964.

³ Woolner, L. B., Beahrs, O. H., Black, B. M., McConahey, W. M., and Keating, F. R. junr., *American Journal of Surgery*, 1961, **102**, 354.

⁴ Russell, W. O., Ibanez, M. L., Clark, R. L., and White, E. C., *Cancer*, 1963, **16**, 1425.

⁵ Richardson, J. E., Beaugié, J. M., Brown, C. L., and Doniach, I., *British Journal of Surgery*, 1974, **61**, 85.

New Vasodilator Drugs for Hypertension

SIR,—In your leading article (27 October, p. 185) you draw attention to the interesting new peripherally acting drugs which are becoming available for the treatment of hypertension and you mention diazoxide, guanidine, and minoxidil. Prazosin,^{1,2} an amino-

quinazoline, is another such drug that deserves mention. The mode of action appears to be a functional blockade of the α -adreno-receptor without receptor occupancy. Relatively little has been published on it so far, but good results have been reported^{3,4} and we also have found it useful.

We have used prazosin for up to two years in a mixed group of patients mainly with essential hypertension. The drug was used either in addition to other antihypertensive therapy in patients whose blood pressure was not satisfactorily controlled or as the sole antihypertensive agent in patients who had no previous treatment. Of 24 patients in whom the drug could be evaluated, only three showed little or no response and in many the blood pressure control has been very satisfactory. There was little postural effect and tolerance was not seen. The mean daily dose of prazosin was 12.5 mg; individual dosage varied widely, from 1 to 36 mg per day. There was no significant weight increase or fluid retention. Heart rate was not affected except that one patient developed a sinus tachycardia and a possible paroxysmal tachycardia apparently related to taking the drug.

In general, side effects were not a problem, but one patient had headaches, one who was also on methyldopa had odd dreams, and one who was taking chlorpromazine and amitriptyline developed acute agitation which rapidly settled when the drug was stopped. Hypertrichosis has not been noted. Chest x-ray, E.C.G., and the results of laboratory tests, including serum electrolyte, urea, and creatinine levels, liver function tests, haematological and serological examinations, and urine analysis, did not show alterations from the baseline data obtained before prazosin therapy. Three patients suffering from bronchial asthma in addition to their hypertension tolerated prazosin well.—We are, etc.,

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¹ Scriabine, A., Constantine, J. W., Hess, H.-J., and McShane, W. K., *Experientia*, 1968, **24**, 1150.

² Constantine, J. W., McShane, W. K., Scriabine, A., and Hess, H.-J., in *Hypertension—Mechanisms and Management*, ed. Onesti, G., Kim, K. E., and Moyer, J. H. p. 429. New York, Grune and Stratton, 1973.

³ Cohen, B. M., *Journal of Clinical Pharmacology*, 1970, **10**, 408.

⁴ Kincaid-Smith, P., Fang, P., and Laver, M. C., *Clinical Science and Molecular Medicine*, 1973, **45**, 75s.

Parents of Battered Babies

SIR,—Dr. S. M. Smith and his colleagues (17 November 1973, p. 388) examined the age, social status, and personality characteristics of a group of parents of battered babies. They concluded that psychiatric assessment of battering parents is useful in the management of these difficult family situations. No mention was made of the marital status of the parents in the study group or their relationship to the battered child. One is left to conclude that these "parents" were the natural parents and that they were legally married. If this is so, their representative sample is at variance with our experience in Leeds. A survey of 36 "family groups" from each of which a

battered child was admitted to a paediatric ward during the years 1971-3 showed that only 19 (53%) of these children lived with their natural parents; two of these parents were unmarried. Twelve lived with a natural mother and a substitute father and one with a natural father and a substitute mother. Three lived with a natural mother only and one was battered by an unmarried foster mother. It can be seen from our sample that a large minority (47%) of the battered children were not living with their natural parents at the time of the battering. The mean duration of the marriage of natural parents was two years 10 months and that of the relationship of unmarried "parental couples" was eight months.

We feel that our observations on the family groups of battered children must be abnormal and have a bearing on the circumstances leading to child abuse. Therefore any analysis of parental characteristics must surely include consideration of these factors or be incomplete and therefore less meaningful.—We are, etc.,

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Complication of Laparoscopy during Early Pregnancy

SIR,—The report by Dr. M. B. Barnett and Dr. D. T. Y. Liu (23 February, p. 328) of three cases of carbon dioxide gas embolism after penetration of the pregnant uterus by a Verres's needle before laparoscopy is timely and underlines one of the hazards of this procedure when carried out after aspiration termination of pregnancy.

In many women seeking termination laparoscopic sterilization is best postponed until some weeks after the termination, when the uterus has returned to its normal size and vascularity. This is especially so when the patient is seen sufficiently early in her pregnancy for termination to be performed as an outpatient procedure under local anaesthesia (paracervical block). In other women it is appropriate to combine aspiration termination and laparoscopic sterilization, and in such cases I believe the risk of penetrating the uterus can be minimized by introducing the Verres's needle immediately below the umbilicus unconnected to the source of gas. The absence of connecting tubing gives a greater feeling of sensitivity to the needle, which is advanced two or three centimetres parallel to the skin surface before being angled downwards into the peritoneal cavity. The passage of the needle point through the rectus sheath and muscle is clearly felt by the operator's finger and thumb on the proximal end of the needle. Once in the peritoneal cavity the needle point is retracted and the absence of penetration of uterus or bowel is demonstrated by free side-to-side movement. The connecting tubing is then attached to the proximal end of the needle and nitrous oxide, which I prefer to carbon dioxide, introduced into the peritoneal cavity, careful attention being paid to the pressure on the manometer gauge.

Laparoscopic sterilization is a very valuable procedure because of the short in-