"psychosomatic diseases" have emotional sensitivity as their common property, and determinable specific sensitivities are found in most of them. The environment does the rest.—I am, etc.,

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Side-effects of Vinca Alkaloids

SIR,—The findings by Dr. A. Vlăduțiu (22 June, p. 764) of acute dilatation of the gut in guinea-pigs receiving intraperitoneal injections of vinblastine is similar to the experience of others working with this drug. Constipation, abdominal distension, and pain, sometimes sufficient to precipitate laparotomy, as well as acute urinary retention and loss of salivation, occasionally occur in patients receiving vinblastine,^{1,2} though the incidence of these complications is far greater in patients receiving the closely related alkaloid, vincristine.^{3,4} Prophylactic bulk laxatives and other aperients are recommended routinely for patients receiving vincristine.³

Smith⁵ found similar acute dilatation of the gut in mice treated with intraperitoneal injections of vinblastine, and moreover demonstrated degenerative changes in the myenteric plexus of the gut both in man and the mouse. This finding is in keeping with the known neurotoxicity of vinblastine, but more particularly of vincristine.³ Almost certainly direct damage to the myenteric plexus causes paralysis of the gut. There is no evidence for the true ganglion-blocking action of vinblastine suggested by Dr. Vlăduțiu.—I am, etc.,

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Pigmented Gut

SIR,—Your comments on the formation of lipofuscin (8 June, p. 574) are both interesting and informative. In addition to your discussion of the mechanisms involved in lipofuscinosis, the initial site of deposition of this pigment is also of interest. Experimental evidence suggests that lipofuscin deposition occurs first in the lysosome, and that this organelle may be primarily involved in this process. Hibbs *et al.*¹ have demonstrated ultrastructurally the development of lipofuscin in cardiac lysosomes in rats treated with high doses of isoproterenol for a prolonged period. Similar observations in lipofuscin deposition were made in the hearts of rats treated with a brown food colouring (Brown FK).²

Deposition of lipofuscin is apparently associated with lysosomal dysfunction. Thus injections of high doses of Neutral Red induce a profound loss of hepatic lysosomal enzymes,³ which is followed by the deposition of pigment possessing the staining character-

istics of lipofuscin.⁴ In vitamin-E deficiency Moore *et al.*⁵ have shown that lipofuscin deposition in the kidneys is preceded and accompanied by a phase of decreased lysosomal stability which can lead to an increase in the release of hydrolytic enzymes. The connexion between loss of lysosomal enzymes and lipofuscin is not clear, but some workers believe that lipofuscin deposition is one manifestation of an impaired ability of the lysosome to digest some lipid component(s) of intracellular breakdown products.—We are, etc.,

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Pain in the Face

SIR,—Professor H. Miller in his excellent article on pain in the face (8 June, p. 577) implies that migrainous neuralgia is synonymous with sphenopalatine neuralgia and ciliary neuralgia. These latter two conditions are, however, distinct clinical entities and differ from migrainous neuralgia.

Sphenopalatine neuralgia was first described by Greenfield Sluder in 1908¹ and has come to be known as Sluder's neuralgia. It affects the distribution of the maxillary division of the trigeminal nerve and is often associated with nasal obstruction on the affected side. The pain begins below the eye and then radiates across the cheek to the ear, and may involve the teeth. It has none of the regularity of migrainous neuralgia and is relieved, as Sluder described, by cocaineization of the sphenopalatine ganglion. In two of my patients with this condition the posterior end of the middle turbinate was in contact with the nasal septum, and touching with the probe reproduced the headache. Amputation of the middle turbinates and submucous resection resulted in almost total relief of symptoms over two years and one year and six months respectively.

Ciliary neuralgia was described by Charlin in 1931² with the following four characteristics:

- (1) Unilateral acute rhinitis with excessive watering of the nose.
- (2) Oculo-orbital neuralgia, often extreme.
- (3) Lacrimation and acute inflammation of the external part of the eye with possibly keratitis and corneal ulceration.
- (4) Prompt relief by cocaineization of the anterior ethmoid nerve region which is inflamed and swollen.

The onset is usually acute and the attack may not last long enough for the medical practitioner to see it before resolution.

Nasociliary neuralgia was described by Greenfield Sluder, too, in 1922,³ and renamed by him the anterior ethmoid nerve syndrome⁴ in 1927. In this condition the pain affects the area just above the inner canthus but is rarely confined to it. It usually affects the

frontal region and often spreads to involve the whole area of distribution of the ophthalmic division of the trigeminal nerve, and indeed may involve the whole face and even the neck. The gap between the nasal septum and the anterior end of the middle turbinate is usually narrow or absent and probing the area reproduces the headache, whereas cocaineization abolishes it. Slight nasal congestion or allergy is a frequent finding. Sluder's treatment consisted in repeated cocaineization of the nasal roof at the point of entry of the anterior ethmoid nerve or sometimes injection of carbolic acid in alcohol.

This condition is more frequently met with than either sphenopalatine neuralgia or migrainous neuralgia, and is usually relieved by submucous resection with or without amputation of the anterior end of the middle turbinate. The mechanism of nasal headaches is probably that of prolonged build up of pressure in the nasal fossa due to congestion of the mucosa. It is well worth the effort to investigate the nose by probing and cocaineization in patients whose headaches do not, as so often is the case, fall into one of the recognized categories.—I am, etc.,

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SIR,—I feel that the excellent article on pain in the face by Professor Henry Miller (8 June, p. 577) might be expanded with a little information on the use of radiotherapy in minute doses to the appropriate root ganglion.

For some time now general practitioners have been referring patients in increasing numbers to this department with both acute and chronic pain from herpes zoster. Over 500 cases have been dealt with, and it has been possible to do an approximate survey of 100 cases for this letter. Of acute cases, 95% obtained relief in about three days. Fourteen out of 15 cases affecting the fifth nerve were so relieved. A double blind control of limited extent showed overwhelming benefit in favour of treated cases. In chronic cases the results are inversely proportional to the duration of disease before referral and require a series of treatments, whereas acute cases usually require only one. A full report will be offered for publication in the future.—I am, etc.,

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Myocardial Infarction and Angina

SIR,—Eskola *et al.*¹ showed in a series of 12 patients that urinary coproporphyrin excretion was abnormally high for several days following acute myocardial infarction. Koskela² confirmed this but found no such increase following angina. These results suggest that measurement of urinary coproporphyrin excretion might help to distinguish myocardial infarction from angina.

To test this hypothesis, consecutive morning urine specimens from 50 patients admitted to