endocrine hypothesis. For example, there must be in the population many men who have regularly donated blood every six months for many years. Obviously this is not equivalent to a monthly menstrual bleed. Nevertheless it would be interesting to see whether these men are in any way protected against coronary thrombosis as compared with a group of non-donors.

(2) If true the concept would mean that protection against coronary thrombosis could be provided at very low cost. There would be no need for life-long drug taking or dietary changes.

(3) If the bleeding hypothesis were true, the blood transfusion service would cease to have any problem in acquiring blood.

I realize that my hypothesis is very unlikely to be valid. But when so little progress is being made in other directions and when the potential rewards are so great, a survey of the effects of blood donation on coronary disease would appear to be worthwhile.—I am, etc.,

NAFISA HORROBIN.

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Hypokalaemia in Influenza

SIR,—I was interested to read the comments by Drs. J. Stevenson, B. K. Mandal, and M. H. Hambling (14 February, p. 429) on their experiences in the recent influenza epidemic. I note that one quarter of their cases in which the plasma potassium was estimated in 1969-70 showed a figure below 3·6 mEq./l.

My cases have not yet had their diagnosis proved virologically or serologically, but out of 37 presumed cases of influenza there were twelve deaths. In 26 the plasma potassium was estimated; in 15 (four fatal) this was less than 3·6 mEq./l. A few of these cases had received thiazide drugs, but in the case with the most persistently low levels, who was a previously healthy 32-year-old female, 28 weeks pregnant (the baby was later stillborn), no thiazide drugs had been used.

It is clear that the "epidemic" varied in its intensity and severity in different parts of the country. Some nearby villages were entirely unaffected. It is clear, also, that should a viral toxin produce tubular damage to account for failure of potassium conservation by the kidney, and hence hypokalaemia, this may take a few days to show itself, so that plasma potassium levels may not fall until three to four days after admission. Dr. F. O. MacCallum has been kind to point out that there is no viraemia in influenza, and any tubular damage must be due to a toxin.

We hope to learn from the examination of some of our necropsy material whether this hypothesis is correct.—I am, etc.,

G. S. CROCKETT.

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Kerslake Curette

SIR,—The letter from Mr. J. M. McGarry (3 January, p. 49) gives me some concern because it may well suggest to the unknowing that the equipment which I devised with the help of Peacocks (Surgical & Medical Equipment) Ltd. is inadequate.

I would like to say that many hundreds of these curettes have been sent all over the country and abroad and this is the first grumble regarding the "hemispherical type" curette which has come to my notice. Up to date, the only adverse criticism has, I am sure, been based on experience gathered from inadequately sterilized and overheated curettes. By this, I mean that the main virtue of the plastic suction curette is that the contents can be seen at the earliest opportunity. If the curette becomes opaque, this advantage is lost but the disadvantage Mr. McGarry mentions is, in fact, no worse than anyone carrying out termination of an early pregnancy by the traditional method of "snatch and grab." In other words, he has to make sure that the uterus is emptied of all solid material.

This being so, all that obviously is needed, even if Mr. McGarry's unfortunate experience is repeated, is that whoever is doing this operation should be fully aware of what is in the uterus before it is evacuated. This Mr. McGarry did not seem to have undue difficulty in ascertaining.—I am, etc.,

DOROTHEA KERSLAKE.

Newcastle upon Tyne.

Modes of Memory

SIR,—It was of considerable interest to find Professor J. Z. Young (14 March, p. 647) quoting Piaget for the basic assumptions on which to base his own idea. Piaget's "clinical" technique has been criticized for relying on the interpretation of verbal responses of children. For an information theorist such as Young, such a method is inexact since it assumes "that the statistics of languages are constant. This is, at best, an approximation and for the study of behaviour in general would often be untrue—always untrue for an animal that is learning or forgetting."[1]

There is perhaps justification for both methods if their results are parallel. I have recently been struck by another example of parallel thinking—that between Young's neurological theory and Kelly's psychology of personal constructs. Young suggests an internal unified structure which is a model of the environment, built up by the continuous assimilation of perceptual events. This internal structure or model is also a structure of alternative possibilities of action; it is both model and plan. Kelly also postulates the development of an internal representation of the environment by means of tested alternative constructions which are used to predict and control events.[2]

Thus Young and Kelly both suggest an internal representation of the environment made up of a hierarchy of dichotomous choices (constructs) which are seen in terms of alternative possibilities of action in the environment. It is very surprising that these two writers should develop such similar models of behaviour when their possibilities of action (for example, methods of investigation) are so different.

The approximation of two theories in this way is productive of new hypotheses. For instance anxiety, according to Kelly, is the awareness that the events one is confronted with lie mostly outside the range of convenience of one's construct system. We can postulate that the frontal lobe is involved in controlling the events which will be assimilated into the construct system as new constructs. The prefrontal cortex is thought to inhibit the control system which inhibits afferent perceptual input,[3] and loss of this part of the cortex will reduce and disorganize perceptual input. In fact prefrontal leucotomy impairs some aspects of registration and short term memory; it also reduces chronic anxiety. Thus it may impair the assimiliation of new constructs and promote the use of the existing construct system.

Behavioural training in the use of the existing construct system to construe new events effectively may be as useful in the treatment of chronically anxious patients as leucotomy. Possibly it may be achieved with the "Wisconsin General Testing" apparatus,[4] or with the methods used by Bruner *et al.*[5] on concept-formation. Such training would require a more sophisticated theory than the stimulus-response model which underlies present behaviour therapy methods. A psychoneurological theory does suggest possibilities for treatment involving higher layers of the construct sytem. Thought disorder and hallucinations may eventually be interpreted in terms of a possible treatment programme by the use of a theoretical structure unifying perceptual model and plan of action.—I am, etc.,

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Unusual Effect of Fenfluramine

SIR,—I wish to draw attention to possible side-reactions of the drug fenfluramine (Ponderax).

Recently I saw a 38-year-old married woman with no previous psychiatric referrals. She had a stable previous personality and her social situation was satisfactory. Because of increasing weight she was prescribed fenfluramine 20 mg. t.d.s. After three weeks on the drug her husband and friends remarked that she was depressed and slowed down. She was aware of being low in spirits, attributed this to the drug and stopped it. Her mood then improved and after an interval of several weeks she decided to restart fenfluramine because her weight was again increasing. Five days after restarting she set out on her weekly shopping expedition to the local supermarket. She was again feeling low in spirits and unusually agitated. In the supermarket she began to place goods in the wire carrier, but became increasingly confused, unable to find her purse, and feeling that she was late and must rush home. She then developed a state of depersonalization in which she was

aware in a dream-like way of cramming goods which she did not need from the shelves into her own shopping basket with no attempt to conceal them. Having done this she rushed to the cash desk, paid for the goods in the wire carrier, but carrying out the other goods exposed in her own shopping bag. As soon as she had passed through the cash barrier she was stopped and subsequently charged with shoplifting. After she arrived home her husband concluded that her state of mind was due to the drug and she stopped taking it for the second time. As a result of the charge she was referred for psychiatric opinion, and when seen two weeks later her mental state was normal. It was concluded that her depression and confusional state had been due to the effects of fenfluramine.

Similar cases have been reported previously[1 2] and are presumably due to the psycho-active nature of the drug. Fenfluramine seems to possess a complex mixture of activities related to its amphetamine-like structure. It is known to interact with monoamine oxidase inhibitors,[2] and cause facial dyskinesia[2-4] as do other amphetamine derivatives. In therapeutic doses fenfluramine may cause sedation[5] or, in some cases, confusion as above, but in elevated doses the drug seems to show stimulant properties as reflected by recent animal work,[6] temporary mood depression on stopping the drug therapy,[7] anxiety, agitation, and convulsions noted on overdose,[4] and the inhibition and rebound of R.E.M. sleep. Oswald[8] states that the last is an indication of a dependence liability of the amphetamine type. The sedative action on the other hand could give rise to abuse commonly seen with this category of drug.

Fenfluramine exhibits in one molecule a wide spectrum of psycho-mimetic activity ranging from sedation to stimulation, which is reminiscent of the barbiturate/amphetamine mixtures. It should, therefore, be given with care so that its dependence-producing potential can be properly evaluated.—I am, etc.,

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Self-examination of the Breast

SIR,—In your leading article on the treatment of primary cancer of the breast (7 March, p. 579) you rightly mention first as influencing prognosis "the biological behaviour of the tumour and its host." May I make some observations and a suggestion arising out of the other prognostic factor you mention—"the extent of the disease at the time of presentation."

All examinations for carcinoma of the breast suffer from the weakness as screening procedures that a negative finding is valid only for the time of the examination. The position is quite different from that of cervical smears, in which the biological potentialities of the cells can be assessed. The logistics and economics of medical care are such that this weakness cannot be overcome by the frequency of examinations. This leaves self-examination as the only practical large scale screening procedure at the present time. Training in and adoption of regular monthly self-examination of the breasts, as has been advocated in the United States, are unlikely for a variety of reasons to find favour except with a small minority of women.

Under these circumstances may I mention a simple but efficient method of self-examination of the breasts. If a woman washes her breasts with the soaped hands rather than with a flannel or sponge, the pulps of the fingers are automatically placed at a right angle to the chest wall, the correct position for determining any pathological deviation from the normal in the consistency of any part of the breasts. Being a routine hygienic measure, it is free from the psychological overtones, and the consequent errors, of conscious examination of the breasts for a dreaded disease, while its simplicity makes it a practicable large scale screening procedure. Women adopting this practice and reporting to their doctor if they notice any abnormality will have the satisfaction of knowing that they have done all that is possible on their part to secure a favourable outcome to treatment.—I am, etc.,

DAVID PATEY.

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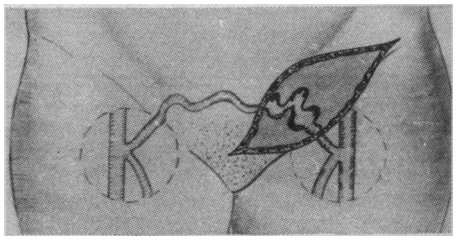
Unusual Cause of Inguinal Mass

SIR,—A female patient, aged 80, was admitted as an emergency with a mass in the left inguinal region which had appeared two days previously and had become progressively more tender. Six years previously she had had a left inguinal herniorrhaphy, and six months previously she had attended hospital with lower abdominal pain. On the latter occasion a diagnosis of diverticulitis was made clinically, and confirmed radiologically. At the time of her admission, however, she was free from bowel symptoms.

On examination, a swelling was found in the left inguinal region extending across to the mid-line. The mass was 2 in. × 2 in. (5 cm. × 5 cm.) in size, apparently localized, of firm, smooth consistency, and appeared to arise from the external inguinal ring. The overlying skin was red and inflamed, and the whole mass was tender. There were no symptoms or signs of intestinal obstruction or peritonitis apart from nausea. A diagnosis of an irreducible recurrent inguinal hernia, probably containing strangulated omentum, was made.

At operation, the cause of the swelling was found to be a segment of varicosed vein which was the site of a thrombophlebitis (Fig.). The vein originated from the long saphenous just proximal to the point at which it penetrated the deep fascia. Its path ran through the subcutaneous tissue superficial to the membranous layer. It followed a course in an upward and medial direction, across the suprapubic region and was traced to the opposite side where it joined the right long saphenous in the same manner.



Preoperatively, it had been noted that the patient had extensive varicose veins of both legs. Her wound healed without difficulty, but her postoperative course was complicated by an episode of severe superficial thrombophlebitis and possibly coexistent deep vein thrombosis which was treated by bed rest, local support, and ampicillin. After her herniorrhaphy six years previously she also had a superficial thrombophlebitis. In view of this history and the extensive varicose veins in both legs, we did not pursue investigations in search of a more obscure cause of phlebitis in an elderly patient.

We are grateful to Mr. A. I. S. Macpherson for his permission to publish this case.

—We are, etc.,

J. M. S. JOHNSTONE.
R. F. RINTOUL.

Department of Surgery,
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Council Election of R.C.S.

SIR,—We have received the usual notice of the impending election to fill two vacancies on the council of the Royal College of Surgeons of England.

The present membership of the council is listed on the reverse of the notice and one cannot fail to observe the preponderance of Fellows from the London teaching hospitals. Excluding representatives elected by other faculties, of the 24 places on the council no fewer than 18 are at present held by Fellows on the staff of the London teaching hospitals (in which we include the Royal Postgraduate Medical School and St. Peter's and St. Paul's Hospitals). There is one member of council from Edinburgh, one from a non-teaching hospital, and only three from provincial teaching hospitals. Wales is completely unrepresented.

If one considers the distribution of population in the country and of the Fellows of the College it would seem reasonable that approximately half of the council should come from the London hospitals—both teaching and non-teaching—and that the other half should come from the provinces, again from both the teaching and non undergraduate teaching hospitals.

While it is clear that the over-riding consideration in the impending election should be the suitability of Fellows for service on the council, we would like to suggest that the forthcoming election gives an opportunity to improve the balance of the council.—We are, etc.,

V. H. BARNETT.
M. W. F. DUNNING.
J. A. RUSSELL JOHNSON.
D. LINCOLN LEWIS.
G. K. ROSE.

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