but unmentioned is an identical peak for 0700 to 0900 hours. What is considered to be the significant factor for road traffic accidents in this period? It would have been of great value if further data had been collected (or disclosed)—i.e., (a) evidence of any drugs taken; (b) alcohol levels of persons injured in the road-traffic accidents but not driving, and (c) alcohol levels of persons involved in the road-traffic accidents but not injured.

The basic cause of all accidents is carelessness, and any factor that will cause or is likely to cause a state of carelessness in the majority of drivers should be recognized and, if practicable, excluded. Alcohol is one identifiable factor; it can be excluded.

Blood and/or urine tests should be mandatory on all drivers suspected by police of drunkenness and on all involved in a notifiable traffic accident, and the result be available to the police authorities. This procedure is used abroad and its adoption suggested in this country. The taking of blood or urine samples could at present constitute a trespass against the person, and has given us a reason for opposing such adoption, but the taking of breath for analysis has the same legal defect and also the grave defect that samples cannot easily be kept for independent check analysis.—I am, etc.,

R. WILSON.

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REFERENCES

- ¹ Cassie, A. B., and Allan, W. R., *Brit. med. J.*, 1961, 2, 1668.
- ² Jeffcoate, G. O., *Brit. J. Addict.*, 1958, 54, 81.

SIR,—It seems incredible that Britain should lag behind most of Europe because of legal quibbles over compulsory examination of drivers (26 December, p. 1634). We are nearly 40 years behind the rest of Europe in the adoption of international road signs, and over B.C.G. vaccination it was similar. In Scandinavian countries the blood examination of drivers is strictly enforced and acted on. There are few prosecutions because it is generally arranged that the person driving has a low alcoholic blood content.

I can see little hope of effective legislation being passed in Britain, because so many of our legislators are vulnerable.—I am, etc.,

Monte Carlo.

H. R. B. GIBSON.

SIR,—The six-year experience of examinations of drunken drivers in Manchester so ably and clearly presented by Dr. Simon Freeman (26 December, p. 1634) is both authoritative and timely. Of particular value is the analysis of symptoms and signs and the clear emphasis of diagnostic significance. My partners and I evolved a form of examination and report based on the B.M.A. Special Committee Report (1958), which we will now modify to give further prominence to the clinical signs listed by Dr. Freeman.

Urine testing by the Forensic Laboratory was introduced in Gloucester in January 1963, and since this time we have been left with a strong impression that the guilty pleas had increased and our attendance at summary courts reduced. I have examined the results of 14 cases before and after testing (all easily available records in the city cases), and find the number of guilty pleas to have risen from 9 to 11 and total convictions from 12 to 13. Of the three not-guilty pleas in the last group

two did not produce a urine sample on request.

This small survey would seem to support our impression of the value of the chemical test, and it is difficult, therefore, to agree with Dr. Freeman's conclusion that no chemical test is of value unless mandatory conviction at an agreed blood-alcohol level is introduced. After 10 years of limited experience of these examinations and the subsequent sequelae in the courts, particularly the Crown Courts, I am strongly inclined to the view that such legislation is now desirable (as was suggested at the B.M.A. Annual Representative Meeting in 1964).—I am, etc.,

Gloucester.

G. C. MATHERS.

Gas-cylinder Keys

SIR,—I should like to support most heartily Dr. H. Lister Wilson's letter in the *British Medical Journal* of 19 December, p. 1591. The position of the cylinder pressure gauges on the latest B.O.C. Boyle's machines spoils an otherwise excellent piece of apparatus. It is practically impossible to turn a cylinder on quickly without damaging one's fingers. Surely it is not beyond the manufacturers to remedy this defect, as has been done in other makes of Boyle's machine?—I am, etc.,

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Iatrogenic Ulcers of the Small Intestine

SIR,—Your leader (26 December, p. 1611) concludes: "These reports show clearly that the whole issue should be further investigated." As part of these investigations we wrote to 98 doctors, chosen because they held appropriate hospital appointments, and asked them to complete a questionnaire. The extent to which they consulted their colleagues, as suggested, varied considerably, but many said that the circumstances of the reported cases^{1, 2} were so unusual that they would certainly have heard of them if any had occurred. To give an order of magnitude to the survey, 82 doctors (84%) replied, representing 80 hospitals and over 35,000 beds. (Total U.K. non-mental-hospital beds: c. 260,000.) All positive, doubtful, or ambiguous replies were followed up personally.

Thirteen reported more or less rare conditions of the small intestine, most of which were clearly unrelated to the syndrome in question. There were, however, three additional cases of interest in the present context and we are grateful for permission to publish the following outlines:

(1) In the autumn of 1964 a man in his early fifties, who had been taking chlorothiazide (not potassium chloride so far as can be ascertained from the hospital and general practitioner), presented with a three-month history suggestive of subacute intestinal obstruction. The histology of a stricture found in the jejunum was compatible with Crohn's disease. There has been no recrudescence.

(2) A female aged 81 underwent laparotomy in July 1964 for intestinal obstruction. A stricture was found in the ileum with ulceration of the mucosa and inflammatory reaction not involving the muscle coat. For 18 months this patient had received digoxin and, 2-3 times per week, enteric-coated thiazide/potassium chloride

tablets. Since the operation this treatment has been continued without further trouble.

(3) A female aged 59 with a long history of valvular heart disease was subjected to valvotomy in 1961 and discharged on digitalis, a thiazide, and potassium chloride. In 1962 she began to take prednisolone, 5 mg. b.d., for a skin rash, and in 1963 spironolactone was also given. In May 1964 treatment was changed to an enteric-coated thiazide/potassium chloride preparation, and she was given A.C.T.H. for two weeks while the prednisolone was reduced. In June 1964 she developed subacute intestinal obstruction and was found to have an inflamed segment of jejunum 10-12 in. (25-30 cm.) long, 2 ft. (61 cm.) beyond the duodenum. This was thought to be Crohn's disease and was left intact. She was anaemic with a high E.S.R. Two weeks later she was discharged but continued to have symptoms until readmission for severe cardiac failure in August 1964. Since then she has had various combinations of drugs and a further admission for cardiac failure in December. At that time she did not complain of abdominal symptoms, although she had a tender congested liver.

These cases are still being followed up. At present it looks as if the last two may be related to the ingestion of enteric-coated thiazide/potassium chloride tablets. In the first case the highly experienced surgeon stands by the original diagnosis of Crohn's disease.

From the replies there was obviously no indication that, regardless of aetiology, disorders of the small intestine of the type recently reported have become noticeably more common in the past three years, during which enteric-coated thiazide/potassium chloride preparations have been in widespread use. (Combined preparations account for about one-third of diuretic prescriptions outside hospitals.) Although other cases of the syndrome may well come to light, it seems improbable, therefore, that any great number is occurring but being incorrectly labelled.

It is interesting to speculate on the apparent relative immunity of this country. A contributory factor may be that there are possibly important differences in the formulation of some of the thiazide/potassium chloride tablets available here and elsewhere. The Committee on Safety of Drugs is being kept informed.—We are, etc.,

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REFERENCES

- ¹ Lindholmer, B., Nyman, E., and Räf, L., *Acta chir. scand.*, 1964, 128, 310.
- ² Baker, D. R., Schrader, W. H., and Hitchcock, C. R., *J. Amer. med. Ass.*, 1964, 190, 586.

Toxic Insecticides

SIR,—Dr. A. M. G. Campbell's warning (26 December, p. 1658) about the use and abuse of the increasing number of toxic insecticides is most timely. We know that most of these substances are—to some extent perhaps justifiably—described by the makers as harmless or safe after extensive initial toxicity tests, but nothing or little is said about their possible later toxic effects.

Our ignorance about this latent toxicity is due to several factors which unfortunately manifest themselves only after their prolonged use. It is not widely known that in some of them the toxicity is not due to the original compound itself—e.g., sometimes a comparatively small part of the much used organo-

phosphoric compounds change in the plant or in the animal into new, often unidentifiable, substances of the greatest toxicity. In these cases absence of the original insecticide on analysis does not prove the absence of the most toxic unidentified substances derived from it.

Another problem is presented by the highly toxic chlorinated-hydrocarbons (aldrin, dieldrin, lindane, etc.), which are widely used without any particular knowledge about the mechanism of their toxicity, as Dr. Campbell emphasized. It is known that most of us harbour a considerable, not specified, amount of them in our body fat without any obvious ill-effect. We do not know what are their effects when, owing to severe or prolonged illness, the stores of the body fat are suddenly mobilized and large quantities of the stored chlorinated-hydrocarbons are liberated into the system.

When an overt polyneuropathy develops there is usually time available to go into further details about the history of the case. There might be however other, less striking, manifestations of chronic toxicity due to these insecticides. As their primary toxic action consists in the destruction of enzymes like cholinesterase, trypsin, liver- and other esterases, the partial replacement of which is within the capability of the damaged organism in cases of relatively low degree poisoning, we might also encounter in the future different degrees of disturbances of the protein and amino-acid metabolism not yet explored. We have at present little possibility to trace or to elucidate these conditions.

With the continuous increase of the marketing of new insecticides (without which, incidentally, our agricultural progress would be greatly impeded), it is absolutely essential that the authorities issue stricter regulations and provide control for the protection of the workers administering them, and also for the protection of the public. Doubtful cases should immediately be referred to centres which should establish suitable methods and gain the necessary experience to investigate them, the more so as many of the delayed toxic effects might develop insidiously.—I am, etc.,

London W.1.

Z. A. LEITNER.

Vaginal Bleeding in Chorionepithelioma

SIR,—Vaginal bleeding is a common event in chorionepithelioma. Frequently it originates from the uterus, but sometimes intensely vascular vaginal metastases are responsible. The differentiation of these two sources is important for two reasons: (1) hysterectomy may be performed for alleged uterine bleeding, and only when haemorrhage does not cease following this procedure is it realized that vaginal metastases are responsible; (2) uterine haemorrhage usually ceases within two to three days of commencing chemotherapy, whereas vaginal metastases may give rise to quite severe bleeding during the first two to three weeks of treatment. Surgical measures to control haemorrhage are therefore rarely required in uterine bleeding, whereas they are frequently necessary in bleeding from vaginal metastases.

There are three main methods of controlling haemorrhage from vaginal metastases:

(a) *Packing the vagina*.—We have found this procedure unsatisfactory in these cases.

The bleeding is often arterial and ill-controlled by packing. If there is torrential haemorrhage digital pressure directly over the bleeding nodule may control blood loss until the patient is moved to theatre for suture.

(b) *Excision of the metastases*.—This is sometimes attempted, but, as the accompanying arteriogram shows (see Figure), the large vessels associated with these metastases may extend into deep structures. The visible part of the metastasis is often analogous to the iceberg, so that it may be continuous with a uterine or an extrauterine mass of tumour. Adequate excision would leave a very large deficit of tissue.

(c) *Suture*.—This we have found uniformly successful. The metastasis is gently rubbed with a dry swab until all loose necrotic tissue has been wiped away, leaving the appearance of an ulcer with sharply demarcated edges. This ulcer is then underlaid with interrupted stitches of strong catgut (e.g., chromic 1 or 2) which extend 1 cm. into firm tissue on either side of the ulcer. When the sutures are tied the haemorrhage is controlled. This control lasts long enough for the metastases to be brought under the influence of chemotherapy.

Now that chorionepithelioma, with or without metastases, is regularly curable with drugs,¹ the effective control of haemorrhage without causing mutilation assumes greater importance. Uterine haemorrhage rarely requires surgical intervention. Suture appears to be the method of choice in haemorrhage from vaginal metastases.—We are, etc.,

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REFERENCES

- ¹ Bagshawe, K. D., *Brit. med. J.*, 1963, 2, 1303

"Epidemic Collapse"

SIR,—Over the past eight months I have seen a number of patients, of all ages, who have suffered identical symptoms to those suffered by the schoolchildren described by Drs. G. T. Pollock and T. M. Clayton (26 December, p. 1625). The illness often is very short-lived, or it occurs in a mild form; in such cases the general practitioners may not

be contacted. At other times it is diagnosed variously as "a touch of food poisoning," or "a touch of influenza," or as "gastric 'flu'."

Apart from sporadic cases, this condition has occurred in waves on estates (as in Northfleet, Kent) and in Graylingwell Hospital, among staff and patients. It was usually acute and short-lived, but was definitely not associated with hysteria, except in a very few cases. Unfortunately, some patients tend to relapse or remain mildly unwell for days or weeks.

Although I have not studied most of these patients in any detail, I have studied several with residual headaches which followed episodes of this kind. These headaches tend to be "deep" or "behind the eyes" or "since waking up," and are neither migrainous nor muscle contraction headaches. They appear to fall in the American Medical Association headache classification under Category 6a or 6b, although they tend to be persistent and unaccompanied by pyrexia. Additional symptoms in this residual phase include vague malaise, weakness, unaccustomed faintness, nausea, and occasional vertigo. These symptoms were present in previously tough, healthy, active people, as well as in neurotic or hysterical patients.

In view of the references to "mass hysteria" occurring in the headlines of the popular press, I feel it important to point out that in the cases I have seen there has been absolutely no positive evidence of hysterical or neurotic mechanisms as a primary cause of the symptoms, and the label "mass hysteria" appears to have stuck because no other cause, such as virus infection, has been found so far.—I am, etc.,

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Horsham, Sussex.

SIR,—Some of the features of the Coventry outbreak are reminiscent of a disease—thought to be a virus infection, though this has never been proved—which is endemic in the Lowestoft area. Two possible explanations for the "collapse" in these patients—with frontal headache, "fainting," vomiting, pains, diarrhoea, and so on—were given last year.¹ It is of interest that one of these explanations involves the Valsalva manoeuvre mentioned by Dr. A. Frame (9 January, p. 127).

The incubation period of about two or sometimes three days, indicated in the case-incidence chart of Drs. Pollock and Clayton, is the same as that often seen in the East Anglian endemic cases; and relapses, noted in 24% of Coventry cases, are also noted here. Diarrhoea, however, seems commoner here. Perhaps there is a large group of infections—due to various E.C.H.O. viruses, maybe—where the spectrum of symptoms and signs is much the same; though certain clinical features may be more prominent in some epidemics than in others. Perhaps the fact that the Coventry outbreak was a sudden one, affecting perhaps a susceptible population in schools, whilst the disease here is endemic, and not properly speaking an epidemic at all, may account for some of the differences in the clinical pictures.—I am, etc.,

Lowestoft, Suffolk. M. P. CARTER.

REFERENCE

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