Dangers of Gas Fires

SIR,—Dr. J. Chapman (28 April, p. 243) rightly points out the dangers of using gas fires with inadequate ventilation because of draught-proofing.

In the training of gas fitters emphasis is placed on adequate flues and air supply for appliances. Doctors who suspect that patients are suffering from the effects of carbon monoxide can ask for atmospheric tests to be carried out. One of the benefits of conversion to natural gas is that unsatisfactory conditions are brought to light and remedied.—We are, etc.,

GORONWY HUGHES

Altrincham

Chief Medical Officer,
North West Gas Board

ERIC FEAR

Leeds

Chief Medical Officer,
North East Gas Board

Pilot Error

SIR,—In your leading article on Pilot Error (5 May, p. 258) you say that the largest proportion of aircraft accidents "are related to take-off and landing." You then quote air fatality figures on a mileage basis and almost make us believe that air travel is safer than road travel.

As every flight, however short, requires a take-off and a landing, aircraft accident statistics should relate to flights rather than to miles covered. When boarding a plane one would like to know one's chances per flight rather than per 10^7 miles. Purely on mileage one could probably prove that space exploration so far has been safer than car travelling.—I am, etc.,

G. R. GENOVESE

Salisbury

Pruritus Vulvae

SIR,—Your leading article on pruritus vulvae (17 March, p. 628) omits one of the foremost causes of pruritus vulvae seen in gynaecological and general practice today—the wearing of tights by young and, to a lesser extent, old women. Although it is true that the related complaint is usually one of discharge, it is frequently accompanied by pruritus. I see an average of 10 patients per week in whom the wearing of tights is the cause or part-cause of symptoms.

Many women have excess cervical mucus, epithelial debris, and intermittent Bartholin secretion, without any infective element. Tights and other snugly fitting undergarments prevent normal evaporation of discharge at the introitus, and by their very nature increase heating of the external genitalia, causing added sweat gland secretion. Together the effect is to cause constant moistness to the vulval and perineal areas with redness and soreness, as is seen in breast and pendulous abdomen intertrigo. Even when trichomonas or monilia infections are present the symptoms will be increased by tights.

Tights are unhygienic, and the answer is to advise women not to wear them. Teenage girls and young women, I find, are loath to accept my advice in view of the high hem-lines of today; but many do accede to the suggestion that full-length hose with

"hold-up" tops, which reach almost to the groin, be worn instead. In older women the grip tops will be contraindicated in the presence of varicose veins, but these patients are more willing to accept the conventional stocking and suspender support.

The women's magazines would do their readers much good by "pushing" advertisements for stockings rather than tights.—I am, etc.,

CALUM N. MCFARLANE

Walsall

Stimulation of Corticotrophin Release

SIR,—We read with interest the report by Dr. J. J. Staub and others (13 February, p. 267) comparing the corticotrophin (ACTH) and corticosteroid response to lysine vasopressin, insulin, and pyrogen in man.

We have compared the pattern of release of ACTH in subjects without hypothalamic-pituitary disease following four different stimuli—insulin-induced hypoglycemia (I.I.H.), pneumoencephalography (P.E.G.), electric convulsion therapy (E.C.T.), and 8-lysine vasopressin (LVP)—which presumably release ACTH through different mechanisms. Plasma ACTH concentrations were determined by radioimmunoassay.¹

The mean increments ($\pm$ S.E.) in plasma ACTH (pg/ml) with these stimuli were as follows: I.I.H., 262 ± 50 ($n = 22$); P.E.G., 384 ± 60 ($n = 17$); E.C.T., 465 ± 105 ($n = 11$); and LVP, 406 ± 249 ($n = 3$). There were no statistically significant differences between the increments of ACTH released after the four stimuli (fig. 1). The

FIG. 1 Comparison of mean increment changes in plasma ACTH concentration following various stresses in subjects without hypothalamic-pituitary disease. (The figures refer to the numbers of subjects tested.)

peak in the mean plasma ACTH concentration occurred 45 min after the intravenous injection of 0.1 unit of insulin in the I.I.H. group, 45–60 min after beginning the P.E.G. group, 2.5 min after the electrical stimulus in the E.C.T. group, and 6 min after the intravenous injection of 5 units of LVP (fig. 2).

We conclude from our data that I.I.H., P.E.G., E.C.T., and LVP are potent stimuli resulting in ACTH release. The immediate discharge of ACTH after E.C.T., slightly delayed release after LVP, and prolonged delayed release after P.E.G. and I.I.H. suggest the utilization of different ACTH releasing mechanisms and the presence of a readily dischargeable ACTH pool in man.

FIG. 2 Temporal changes in plasma ACTH concentration in normal subjects after different stresses. The range of plasma ACTH concentrations in normal unstressed man is shown as the stippled band.

Our data are in slight disagreement with those of Dr. Staub and his colleagues in regard to vasopressin. This could be explained by the fact that their sampling time was less frequent than ours and the route of administration of vasopressin was different. Significant ACTH release is supported by the finding of a significant corticosteroid response in most of their subjects after vasopressin. Nonetheless, vasopressin appears to be a potent stimulus for ACTH release.—We are, etc.,

JOHN P. ALLEN
DAVID M. COOK
JOAN OLSON

University of Oregon Medical School,
Portland, Oregon

¹ Rees, L. H., et al., *Endocrinology*, 1971, 89, 254.

Foster Homes for the Elderly

SIR,—In dealing with crisis situations in families where children are involved and need to be taken care of, the social services have lists of foster parents who will take children—infants to teenagers—into their own homes at a moment's notice. It is suggested that a parallel scheme be introduced to deal with the elderly where the patient needs to be taken care of for medical, surgical, or psychiatric reasons of a relatively minor nature, so as to avoid admission to hospital.

Most doctors will have experience of people who have the qualities to care for their elderly relatives. Even though this means considerable responsibility and hard work and the patient's general practitioner advises that admission to hospital is desirable so as to avoid the continued burden on the relatives they decline this advice simply because they have that extra gift to be able to cope with the situation. I believe these people and others would be prepared to take responsibility for any elderly person with mental and physical infirmity and thus admission to hospital, with the possibility of permanent hospitalization, could be avoided.