of the condition. Moreover, drug habituation and alcoholism are certainly not confined to one type of personality. Nevertheless, it is surely possible to distinguish a fairly numerous group that tends to resort to drugs or alcohol with particular frequency. Such people have a lowered tolerance for the world of real experience; they are unduly sensitive to their environment and the impression that they make upon it. It is as if there were a conflict between what they anticipate or seem to achieve and that which is actually confirmed by experience, and this conflict drives them to try to escape from time to time.

It seems likely that this pattern is associated with a disturbance of adrenal cortical secretion. Such secretion is generally accompanied by an elevation of mood, but, as Professor Groen has pointed out, if this euphoric influence is not enforced by a favourable response from the environment the mood changes and dysphoria results. This is probably the result of overburdening of and consequent incordination of the feed-back systems. As to whether such people turn for relief to drink or drugs, or both, depends upon their social environment as well as their particular circumstances. Of course some may try to escape by totally different means.—I am, etc.,

Reginald Carter Foundation for Alcohol Patients,

BASIL MERRIMAN.

REFERENCE

1 Groen, J. J., Practitioner, 1960, 184, 698.

First-aid Treatment of Burns

Sir,—I was interested in Dr. F. L. Willington’s medical memorandum (July 23, p. 277) on the use of milk for the early treatment of burns. A standardized first-aid treatment should be agreed upon by the medical profession, who could then advise the public accordingly. To my way of thinking, many doctors are as confused as the public. How often, for example, does one see a casualty officer berate a patient arriving with a burn smeared with a “greasy” application such as lard, butter, or olive oil? As the error of the patient’s ways is being explained to him, he is being subjected to a cleansing process with cetavlon (often very painful, and liable to rub off blister-skin), which is followed by the application of another “greasy” substance such as vaseline gauze.

Several years ago farm labourers in Cheshire proved to my satisfaction that they could prevent blisters of burnt skin following flash burns occurring in their machine sheds. They immediately immersed the affected part (hand and/or arm) in the drum of “paraffin” (kerosene) always present in the sheds. I personally have seen arms hairless, scorched, and discoloured a dirty brown, but not a sign of a blister, on men who carry on normal working. I regard this amazing result as due to (a) a cooling effect from surface evaporation, and (b) an effect which, for want of a better term, I call “skin de-hydration.” Kerosene is not readily available in casualty departments, so I tried alcohol, which is. The results are equally good, and in my opinion could well justify general usage of the method not only in hospital, but in the home and place of work.

The method, which I call the “alcohol-dehydration method,” is suitable for early burns (including acid burns) and scalds. The affected part is dabbed moist with a gauze swab soaked in surgical spirit (or methylated spirit, or absolute alcohol). Evaporation, which at first is rapid, is allowed to occur, after which alcohol is reapplied. This process is constantly repeated for 5–30 minutes, depending on the severity of the burn. This works better than immersion in alcohol. Quite rapidly the angry redness leaves the burnt part, and the pain disappears with it. When the skin becomes blanched, gauze soaked in alcohol is applied loosely as a wet dressing, the patient being issued with a small bottle of alcohol to moisten it occasionally. If there has been some delay in applying this treatment, a very reduced amount of blistering can occur; quite apart from the limitation of blistering, I feel that the impregnation of the skin with alcohol must reduce the chance of subsequent infection in the blisters. The method should not be used over any area denuded of blister-skin at the time of treatment, or, of course, in the eye.

The sceptics will say that if no blistering occurs it would have been only a first-degree burn anyway. This is not so for two easy-to-observe reasons: (a) any part that may be missed out such as the cranial side of the ear pinna, will blister while the treated parts will not; (b) the parts which would have blistered but were prevented from doing so often go on to give a dry, slightly wrinkled, and sometimes slightly hypopigmented layer which desquamates some days later without any inconvenience to the patient. Having used the method for 10 years on both sides of the Atlantic, I know none better or more effective.—I am, etc.,

Ontario, Canada.

G. KEITH THOMAS.

Monoamine Oxidase Inhibitors and Rauwolfia Compounds

Sir,—Drugs derived from Rauwolfia serpentina are used for the symptomatic treatment of anxiety, agitation, and tension, and the monoamine oxidase inhibitors for depression. The rauwolfia compounds are believed to act by releasing “bound” serotonin, and the monoamine oxidase inhibitors increase serotonin level by the inhibition of its destruction. If both drugs were administered simultaneously, on theoretical grounds there could result a sudden flooding of the brain with 5-hydroxytryptamine and a danger of cell depolarization. In clinical practice tension, agitation, and anxiety are commonly encountered in association with depression, and one is tempted to combine one of the rauwolfia drugs with a monoamine oxidase inhibitor. That such a combination is dangerous is shown by an experience which occurred at this hospital recently.

A severely subnormal male patient, 18 years of age, was given “niamid” 25 mg. daily for seven days, because this monoamine oxidase inhibitor has in my experience fewer side-effects, is non-toxic, and has been found to be of value in stimulating the activity of apathetic or inert mental defectives. Because he became overactive on this drug it was stopped, and two days later he was given 10 mg. t.i.d. of a new “reserpine-like compound,” 3-isobutyl-1,2,3,4,6,7-hexahydro-9,10-dimethoxybenzo [a] quinolizin-2-one (“nitoform”), to control his overactivity. Six hours later he collapsed, had an epileptiform attack, was moderately unconscious, but responded to painful stimuli, developed muscular spasms leading to opisthotonos, a flushed face, rapid respirations (35), and pulse (160). He recovered within 15 minutes and appeared quite normal thereafter. Three days later he had a similar attack, but on this occasion his body was arched forward with his hands and arms across his chest, and after the convulsive attack he had periods of moderate unconsciousness for the ensuing six hours. The drug was then stopped. He gradually recovered and has been well since. His medical history and clinical examination lead to the conclusion that these