method of cooling is sponging the patient with tepid water in a cool, well-ventilated room.[9] Sedation, to lower the metabolic rate and prevent convulsions, has its place,[10] though it should be used cautiously, as severe liver damage may occur in heatstroke. Once the body temperature has been restored to normal treatment should be non-specific, with particular attention to restoring fluid balance, blood-clotting mechanisms, and renal function. The chances of full recovery seem to be governed by the duration of unconsciousness and hyperpyrexia, and recovery may take some weeks.

In the United Kingdom heatstroke is not common. Nevertheless, where the environment is excessively hot, such as in the steel or mining industry, operating theatres, or in situations where energy output is very high,[11] timely advice from a doctor who is aware of the possibilities of heatstroke will avoid the need for treatment.

Arsenic and Cancer

Inorganic arsenic has been used for over 200 years to treat conditions as diverse as anaemia, epilepsy, and skin diseases. Now that more effective drugs are available arsenic has been omitted from the *National Formulary*, and there are virtually no indications for prescribing it.

Though the immediate toxic effects of arsenic have long been recognized, the sinister long-term effects are only just coming to be appreciated. Of these generalized pigmentation is the best known but by no means the most important. It does not always have the well-known rain-drop appearance and may at times involve the mouth and so even more closely mimic Addison's disease. The commonest complication is the development of cutaneous neoplasms, both premalignant and malignant. In a survey of 262 patients treated with arsenic between six and 26 years before[1] the characteristic keratoses of the palms and soles were found in over 40%. These keratoses often show histological evidence of intra-epidermal carcinoma. Other effects of arsenic on the skin include the development of multiple superficial basal cell carcinomas, Bowen's disease (intra-epidermal squamous carcinoma), and invasive squamous and basal cell carcinomas. Patients with these lesions do not necessarily have palmar keratoses or other evidence of arsenic intoxication.[2]

The incidence of lesions depends on the total dose of arsenic taken. If the latter has exceeded 400 ml. of Fowler's solution lesions occur in about half the cases,[1] while a total of as little as 75 ml. is capable of giving rise to keratoses and carcinomas. The interval between starting arsenic medication and the appearance of lesions varies from three to 40 years ; thus many patients develop lesions when they are still young. By the time neoplasms have developed the levels of arsenic in the skin, hair, and nails may have returned to normal, and it is impossible to prevent the development of more lesions by removing residual traces of arsenic by treatment with dimercaprol.

Another even more important long-term effect of arsenic is that it probably gives rise to carcinomas in other organs, such as the lung.[3] The exact frequency of this complication is difficult to establish. Patients with Bowen's disease, especially on covered parts and not necessarily due to arsenic, are known to have an increased incidence of systemic cancer.[4 5] As many as one-third of these patients develop systemic cancer within 10 years of the time of diagnosis. Moreover, even patients with palmar keratoses resembling those due to arsenic but in whom no evidence for such a cause is found are more prone than usual to develop cancer.[6]

It is important that these toxic effects should be familiar not only to the medical but also to the pharmaceutical profession, and M. M. Black has recently reviewed the subject in the *Pharmaceutical Journal*.[7] He points out that arsenic is still being given not only in conventional doses as Fowler's solution for conditions such as psoriasis and dermatitis herpetiformis but also in much smaller, though significant, doses as skin and blood tonics. As it is not yet known whether any dose of arsenic, however small, is safe, such empirical prescribing should be condemned.

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Psychological Factors in Renal Transplantation

It is never easy for a patient with chronic renal failure to accept the fact that he must undergo regular haemodialysis if he is to stay alive. Once he does understand this, however, he is likely to develop anxiety and depression, while hostile, overdependent, or child-like behaviour may also occur. It is important that the staff of the renal unit should understand these reactions, and their task is easier the more they know about the patient, his relationship with his family, his finances, and his general security. Not only does the patient himself need sympathetic handling but his family may also need support and help. Patients most likely to make a good adjustment are of good intelligence and reasonably stable personality who receive strong support from their families.

Psychiatric assessment may also be helpful in advising which patient can adjust to long-term haemodialysis and which one should be considered for early renal transplantation. Moreover, W. A. Cramond and his colleagues[1 2] have recently suggested that the psychiatrist also has an important role in the selection of potential renal donors. Because the operation is more likely to be successful if the donor is a relative, complex relationships between the donor, the recipient, and the relatives are likely to occur. For example, Cramond and his colleagues found that the families of patients with chronic renal disease often preselected a donor from their midst. Those donors who openly refused risked rejection by their families. At least one young man put into such a position escaped operation, with his family honour preserved, by approaching one of the members of the medical team confidentially.

The implications of failure of the graft also have to be considered. Cramond and his colleagues rejected the brother of one of their patients as a donor because the relationship was coloured by hostility and resentment. They felt that,

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