

# RECENT ADVANCES

SUCCESSFUL management of heatstroke, one of the hazards of living in hot climates or of working in excessively hot conditions, depends on speedy diagnosis and rapid lowering of the internal body temperature. The classical treatment has been to immerse the victim in a tub of iced water, or to sponge the body with iced water and at the same time fan the patient with air.

But this method has disadvantages. An alternative technique has now been evolved by Professor J.S. Weiner and his colleagues at the Medical Research Council's Environmental Physiology Unit at the London School of Hygiene and Tropical Medicine.

The investigation has been sponsored by the Saudi Arabian Government which was worried by the number of heatstroke cases which occur when the Mecca Pilgrimage (Hadj) takes place in the hot season. In 1961, the last time this happened, there were 511 admissions to hospital — representing an incidence of 1.8 per 1000 pilgrims. In 1981, the next occasion the Hadj falls in the summer, many more pilgrims are expected and it is estimated that there could be 1000 heatstroke cases in Mecca alone — and many more on the way to and from the Holy City.

## ATOMISED WATER

The technique evolved by Pro-

## New Technique To Treat Heatstroke

Dr. W.A.R. Thomson \*

essor Weiner consists of a mesh bed slung over a bath. This enables the patient to be sprayed from above and below with finely atomised water at 15°C. At the same time warm air at 45°C is blown from a height of 50 centimetres over the body. This keeps the skin at a temperature of around 30°.

Trials of the technique reported by Professor Weiner and Dr. Mustafa Khazali in "The Lancet" (8 March 1980) showed it to be highly successful. In experimentally induced heatstroke, temperature was reduced to normal in 6½ minutes compared with 18 minutes by other methods. Further, there was none of the violent shivering which is liable to occur with existing temperature reducing systems.

Equally promising results were obtained when the method was tried out during the 1978 Hadj (three cases, all of which recovered) and at the 1979 Hadj (18 very severe cases, 16 of which recovered).

By 1981, it is hoped to have ten cooling units in each major hospital in Mecca and single units at about 25 health posts on the route taken by pilgrims. □□

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