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STROKE WHILE JOGGING

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ABSTRACT

Jogging is a form of physical exercise that has stimulated the imagination of the public as shown by the recent appearance of its own journal (*Jogging Magazine*, Editor J. Bryant). We wish to report the unusual complication of an acute stroke sustained during jogging.

CASE REPORT

A 45-year-old male technical representative decided to commence jogging after publicity on television. He had stopped smoking eight years ago, but had taken no exercise since he stopped playing football at eighteen. He had suffered no serious illnesses, and blood pressure was normal in 1978 on routine examination. Both parents are alive and well, aged seventy-seven. He started jogging in cold weather in January, 1979. His first three runs were made at night and he was visibly exhausted on his return. He admitted to having pushed himself hard, as is his natural tendency. On the fourth night he collapsed while jogging alone. On examination, he was conscious but had receptive and expressive dysphasia. He was right-handed; tone and reflexes were increased

on this side, with an extensor plantar response. There was no papilloedema or neck stiffness. The pulse was regular, 70 per minute, and the blood pressure was 110/75 mm Hg. His weight was 65 kg and height 175 cm. Chest and skull x-rays were normal. A brain scan showed increased penetration of the isotope in the left parietal region. An arch aortogram showed normal aorta, carotid and vertebral arteries. A computerised tomography head scan showed a lesion in the left insula, clearly demonstrated when contrast medium was given intravenously, almost certainly an infarct (fig. 1). A left carotid angiogram was normal. Other results were: ECG normal on two occasions, cardiac enzymes not elevated; Hb. 14.8 g/dl, white blood count, differential and platelets normal, plasma viscosity and blood clotting factors normal, ESR 15 (later 6) mms/hour, cryoglobulins and

Fig. 1. EMI head scan after injection of contrast medium showing lesion, probably infarct in left insula (courtesy of Department of Radiology, Manchester Royal Infirmary).

Bence Jones protein absent; serological tests for syphilis negative; fasting serum cholesterol and triglycerides, glucose tolerance and protein electrophoresis normal; plasma urea and electrolytes and biochemical profile normal. Short courses of dexamethasone and cyclandelate were given. Within a month he could walk with a stick and use the hand; speech also gradually returned.

We observed further improvement during fifteen months, although some residual signs of the stroke remain. He has recently been able to recommence his usual work.

Reports of the hazards of jogging have usually described predictable orthopaedic and traumatic problems (Corrigan and Fitch, 1972, Corrigan, 1980) but more serious complications (including sudden deaths) while jogging have been reported; most deaths have been attributed to ischaemic heart disease (Opie, 1975; Peniket, 1979; Thompson, Stern et al, 1979). Lynch (1980) studied 56 sudden deaths within 24 hours of sport or sudden exercise in apparently fit, relatively young, males in the British Army; 10 deaths were attributed to subarachnoid haemorrhages. However, the complication of stroke occurring while jogging has not been previously reported, so far as is known. Our patient was relatively young for this condition to occur, apparently well, and most of the risk factors which are associated with cerebro-vascular accidents are absent. Perhaps the true seeds of catastrophe were inherent in the personality of the patient who inadvisedly started jogging in severe weather conditions and failed to set himself reasonable limits. Fortunately, cautious and sensible advice is available in both the scientific and lay literature.

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