Psychophysiological investigations of patients with unilateral symptoms in the hyperventilation syndrome

SIR: I have no quarrel with the results presented in the paper by O'Sullivan *et al* (*Journal*, May 1992, **160**, 664–667), but, at the same time, there is no question that peripheral local mechanisms can be responsible for localised/unilateral symptoms in patients who are in an abnormal metabolic state, in this case in tetany from hyperventilation. One has only to remember that if one suspects tetany in patients who do *not* have symptoms, the symptoms can be produced by a tap on the nerve (Chvostek's sign) or by squeezing the nerve (Trousseau's sign). I have personally experienced tetany when participating in a metabolic experiment to induce hypokalaemic alkalosis, and at times when I had no symptoms I could produce tingling in the fingers and spasm of the thumb by resting my arm on the back of a chair, thus pressing on the radial nerve.

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Longevity and Down's syndrome

SIR: The average life expectancy of individuals with Down's syndrome has increased from an estimated 9 years in 1929, to 12–15 years in 1947, and 18.3 years in 1961 (Oliver & Holland, 1986). Of liveborn Down's syndrome individuals, 44% will survive to the age of 60 years and 13.8% to 68 years respectively compared with 86.4% and 78.4% for the general population (Baird & Sadovnick, 1988). Between the years 1990 and 2010 the number of those with Down's syndrome over the age of 40 years is expected to increase by 75%, but the number with Down's syndrome over 50 years will rise by 200% (Steffelaar & Evenhuis, 1989).

Virtually all those with Down's syndrome over the age of 40 years have neuropathological changes of Alzheimer's disease (Mann, 1988). However, clinical presentation of dementia is observed in only 36% over the age of 35 years (Lai & Williams, 1989). This intriguing paradox of pathological dementia without clinical presentation remains unresolved.

I know of one 72-year-old man with Down's syndrome who shows no clinical evidence of dementia, and one 71-year-old woman with Down's syndrome who has a moderate degree of dementia. I suggest a search for elderly Down's syndrome subjects, with or without dementia. A resulting study of elderly Down's syndrome people would be of great importance in helping to understand the paradox of the presence of neuropathological Alzheimer's disease but few clinical signs. I would welcome cooperation in any resulting future study.

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Neuroleptic malignant syndrome

SIR: The criteria for neuroleptic malignant syndrome (NMS) are well documented (Pope *et al*, 1986), but also not specific. Hermesh *et al* (*Journal*, August 1992, **161**, 254–257) present a prospective study of NMS in in-patients and exclude other diagnoses by referral to a physician.

The critical sign of hyperthermia may accompany infectious pathology; the exclusion criteria for infectious disease are not described in this study. The certain diagnosis of infectious disease, particularly of viral origin, may be difficult or impossible, even if diagnostic tests include urine culture, blood culture, chest X-ray, and lumbar puncture.

The diagnosis of other pathology may not exclude the presence of infection coexistent with NMS which has been described by, among others, Renwick *et al* (1992).

Other diagnostic criteria for NMS – autonomic disturbances, extrapyramidal signs, and clouded mentation – may accompany febrile illness in patients receiving neuroleptics.

Elevated levels of serum creatine phosphokinase (CPK) are demonstrated in one study (Cohen *et al*, 1991) in 70 of 247 (28%) patients admitted to hospital with fever, and are associated with both viral and bacterial infections. Immobilisation secondary to illness may also cause rhabdomyolysis and elevated CPK levels (Marcus *et al*, 1992).

The diagnosis of NMS is often problematic, because of both non-specific diagnostic criteria and the possibility of coexistent pathology.

Febrile illness in patients receiving neuroleptics is more common than NMS; however, the mortality rate from NMS is about 20% (Pope *et al*, 1986). A cautious course of action would be to consider the immediate withdrawal of neuroleptics in a patient with a fever from any cause, while further urgent diagnostic evaluation is undertaken.

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Self videotaping during psychosis

SIR: Psychiatrists sometimes have to use unusual sources of information when assessing a patient. I wish to report a case where an objective account of a patient's illness was unknowingly provided by serial videotape recordings in the absence of other informants.

Case report. A 27-year-old divorced man was brought to hospital by his father as an emergency. He was floridly psychotic and described auditory and visual hallucinations with delusions of persecution and reference. He had no insight, was guarded and suspicious, and refused to give any further details.

Obtaining background information was difficult. His parents were divorced and lived away, having had no close contact with the patient for a year. He had lived as a recluse, with no close friends or acquaintances, and he was not registered with a general practitioner. There was no evidence of drug or alcohol abuse, and a physical examination and urgent investigations were normal. Despite an incomplete assessment, treatment with oral chlorpromazine was begun immediately, because of his obvious distress.

As he improved, the patient told us of his interest in audiovisual equipment and that he had purchased a video camera and had installed a small sound studio in his house. Over the previous year, he had begun to believe that he was being interfered with by witches, who were causing his "brain and body to physically change" through witchcraft. Pleas to the police had been unsuccessful. To provide evidence of this interference, he had deliberately videotaped himself several times over the year.

The patient gave us his consent to view these tapes. Each lasts a few minutes and consists of the patient talking directly to the camera. He gives the date and then describes his various experiences in detail. On several occasions he is angry and distressed, and clearly describes third-person auditory hallucinations, delusions of reference, and visual hallucinations. Throughout his illness and on recovery, the patient did not regain any insight, and believed his tapes to be conclusive proof of the validity of his beliefs. He made an uneventful recovery and was discharged.

An autobiographical account of a psychotic breakdown written after recovery has been described before (Hunter & MacAlpine, 1956).

The memoirs of Shreber, describing his paranoid psychosis while he was the presiding judge at the Dresden Appeal Court, provided the basis for Freud's psychoanalytical theories of paranoia (Strachey, 1958).

Film has been used in psychiatry since the 1930s to illustrate the clinical features of disorders, to present specific therapies, and as a treatment itself as part of group therapy (Pilkington, 1984). More recently the use of audiovisual material has increased and experience of it is important for all psychiatrists. Its value in improving interview techniques has been established (Maguire *et al*, 1986). Patients are sometimes videotaped before recovery for later case presentations and study, but consent is often difficult to obtain, particularly from an acutely ill or paranoid patient.

The use of videotape to record one's own illness has not been reported previously. Written accounts necessarily suffer from being subjective, whereas this patient's account is objective, recorded at the time of the actual perceptions and while unwell. As technology increases and the availability of video cameras becomes more widespread, this type of self-documentation may increase.

My thanks to Dr E. H. Richards for his kind permission to publish this case report.

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