A CASE OF "SEIZURES INDUCED BY MOVEMENT"

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The phenomenon of seizures precipitated by movement has been recognised at least since 1901 when Gowers described three patients, but it is rare. Mathews (1958) reported four cases of "tonic seizures" apparently occurring in the course of disseminated sclerosis, three of which began with movement, walking, turning over in bed or overbreathing. In his discussion of the causation he considers central tetany and excitation or inhibition of the pyramidal or extrapyramidal system by discharge from a subcortical focus, a supplementary motor area or brain stem. The disorder has also been found in association with epidemic encephalitis as described by Wilson (1930) and by Sterling (quoted by Wilson). Twelve cases with no other disease were collected by Lishman, Whitby and their colleagues (Lishman, Symonds, Whitby and Willison, 1962; Whitby, Lishman and FitzGibbon, 1964). They also reviewed the literature and supported the view that it is a form of "reflex epilepsy", though it is unknown whether from discharge from the basal ganglia or the premotor cortex. In support of the latter, Falconer, Drive and Serafetinides (1963) cured a similar, but not identical case, by excision of a scar from the cortex.

We here describe a case which exemplifies most of the features of this bizarre condition because it easily may be thought to be hysterical but, if recognised, can be treated effectively with anticonvulsants.


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without focal or epileptic features. Now he is also on phenytoin and remains well three months later.
The Father. The father, aged 53, said that he thought he was acquainted with the sort of attacks experienced by the patient but (although loquacious) he was a poor witness. It was not established that his were identical with the patient's—he had unilateral sensations but there was no definite precipitation by movement. Nevertheless there were some interesting similarities in his story and a familial incidence is well recognised.

He has congenital nystagmus. Aged 13 years he was concussed but recovered fully. Aged 17 he had his first attack, like his son while riding a bicycle, in which consciousness was lost. He was afterwards in an epileptic colony for three months where he had five "fits" but in which consciousness was not affected. Since that time he has been continuously on anticonvulsants (bromide, phenobarbitone or myoline).

In 1957 he attended a hospital for nervous disease complaining of two sorts of attacks, sudden severe left temporal headache and tingling of the left face, arm and trunk. Clinical examination was normal and electroencephalogram is reported to have shown a generalised abnormality without paroxysmal disturbance. EEG was repeated at another hospital in 1962 following a fugue of two days after a drinking bout. There was "subnormal alpha slowing and mild excess of theta activity without specific epileptic pattern". Still on anticonvulsants, he has no complaints now and he is normal clinically.

Discussion

There seems no doubt that this condition is a distinct entity. It is commoner in young males, often affecting the leg more than the arm. Sudden activity or a surprise startle may initiate a tonic unilateral spasm of short duration, perhaps with a sensory aura. Some patients have spontaneous improvement (Matthews 1958) but in others the attacks become more frequent and most prefer to stay on phenobarbitone or epanutin indefinitely. A greater awareness of the distinctive features may lead to more cases being recognised.

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REFERENCES


A case of "seizures induced by movement".

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