

turn evoke behavioural abnormalities, represents a promising avenue for the further understanding of brain-behaviour relationships.

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#### Trichotillomania

SIR: In their interesting report of a female victim of incest with trichotillomania, Singh & Maguire (*Journal*, July 1989, **155**, 108–109) conclude that sexual conflicts must always be considered when assessing trichotillomania. I would like to add two points to this conclusion.

Firstly, the authors do not mention the presence or absence of trichophagia (hair eating) in their patient. This is essential to ascertain, because of the well-recognised complication of trichobezoar. Mere enquiry is insufficient, as evidenced by Grant *et al* (1979), who reported a trichobezoar occurring when trichophagia was denied. At operation there was incontrovertible evidence of recent hair ingestion. Enquiry into gastrointestinal symptoms, physical examination and further investigations where relevant should be considered when assessing trichotillomania.

Second is the well-worn question of the role of iron deficiency in the picas in general. This has been debated for decades, and there are many anecdotal reports of a dramatic response to iron therapy (e.g. Coleman *et al*, 1981). However, a controlled study in the mentally handicapped (Bicknell, 1975) did not support the conclusions of earlier investigators (e.g. MacDonald & Marshall, 1964) that iron deficiency is aetiologic. McGhee (1980) reported trichotillomania and trichophagia in two children with

iron deficiency anemia whose behaviour ceased when serum haemoglobin was restored to normal levels. One had a trichobezoar, one did not. Whatever the relationship – whether primary or secondary – the occurrence of iron deficiency in conjunction with trichophagia is sufficiently well documented to indicate that a full blood count and serum iron estimation should be considered when assessing trichotillomania.

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#### Failure to convulse with ECT

SIR: Complete inability to convulse in ECT has occasionally been reported (Sharpe & Andrew, 1988). This issue has long been controversial (Freeman, 1988; Pippard & Russel, 1988). Electrical parameters such as electrode placement, stimulus waveform, duration of pulse train and amount of energy delivered have been discussed as possible contributing factors. In clinical practice, the most widespread ECT devices use sine-wave stimulus waveforms (often modified). Pippard & Russel (1988), referring to such instruments, argued that the effective amount of energy delivered is probably too low to induce seizure and a satisfactory clinical response, suggesting that a constant current stimulus of 275–325 mC lasting about 3.25 ms at pulse rate of 50–60 Hz could overcome the problems of a minority of patients with high seizure thresholds. Freeman (1988) agreed, proposing the use of an ECT device which is able to deliver 2000 mC at maximum setting for high threshold patients.

We report a clinical observation, with a modern brief-pulse, constant current device (Thymatron, Somatics) on a cohort of 115 patients (age range 18–78) for which ECT was prescribed by their consultant. Energy delivered ranged from 75.6 to 302.4 mC, with a duration of pulse train that ranged from 0.6