

## BRIEF COMMUNICATION

### PRE-PUBERTAL BIPOLAR DISORDER WITH RAPID CYCLES— A CASE REPORT

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Bipolar disorders usually start in the late teens and are rare before puberty (Bland et al., 1988). Most of the studies show that this illness tends to be familial. The episodes commonly recur every 3-4 years, but a subgroup of patients display 4 or more episodes per year and are termed rapid cyclers (Dunner, 1979). We report a case of a 11 year old boy with regularly occurring 30 day cycles.

#### Case report

An 11 year boy presented with periods of lethargy, poor appetite and diminished interest in normal activities alternating with periods of overactivity, reduced sleep and unruly behaviour. The symptoms started after a temporary separation from home when the boy became quieter and displayed easy fatigability, crying spells and no initiative to go to school. Fifteen days later, he suddenly became boisterous and abusive and talked incessantly. The episodes continued to occur in the same sequence every 15 days for the next 8 months. He was prescribed Imipramine 75 mg/day which switched him into a prolonged manic phase. When examined, he was restless, distractable and had elated mood, racing thoughts and grandiose delusions. Physical examination revealed no signs of puberty. There was no history of affective disorders in any relative. He was diagnosed as Bipolar disorder (Type I) and

put on intramuscular haloperidol 20 mg/day as he was uncooperative for oral medications. His haematological and thyroid function tests as well as EEG were normal. His symptoms did not subside and as there was risk of exhaustion, three modified electroconvulsive therapies (ECTs) were given. His symptoms abated and he was put on lithium (Li) 900 mg/day for 2 weeks (plasma Li levels 0.82 mmol/l) without further benefit. Carbamazepine (CBZ) 600 mg/day was then substituted and clinical euthymia was achieved in ten days. His remission was maintained for about a year on the same dose of CBZ (plasma CBZ levels 8.94 ug/ml), without any side effects.

#### Discussion

Various unusual features of this case need to be highlighted. The age of onset was 11 years and the course was characterised by regular alternation of manic with depressive phases every 15 days with no intervening euthymia and discrete switches from one phase to another. There was no genetic predisposition to affective disorders. Such subgroups of rapid cyclers have been termed spontaneous, classic rapid cyclers (Crowdrey et al., 1983).

Bipolar disorder often occurs in adolescence, but is unlikely before age of 13; even with a genetic predisposition to affective disorders. Akiskal et al. (1985)

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in a series of offsprings and siblings of bipolar patients found that although the mean age of onset of affective symptoms was 15.9 years and age range was 6-24 years; no full blown episodes occurred before puberty.

A pre-pubertal age of onset in our case therefore assumes significance. Rapid cycling occurs only in about 13% of bipolar patients, mostly women (Dunner, 1979). Such cycles are only reported to occur in adults, spontaneously every 36 hours (Hullin *et al.*, 1974) or 48 hours (Bunney and Hartmann, 1965) or are induced by antidepressants (Wehr and Goodwin, 1979). The regularity of the 15-day phases in our patient suggests dysregulation of the periodicity of biological rhythms (Wehr, 1983), especially without any evidence of thyroid dysfunction which are known to induce rapid cycling (Cowdrey *et al.*, 1983).

Life events such as separation are known to precipitate mood disorders in children (Goodyer *et al.*, 1985) and Imipramine could account for the sustained manic state in which the patient presented (Wehr and Goodwin, 1979). A failure to achieve rapid control with haloperidol and extreme agitation necessitated the use of ECT even though caution has been advised regarding its use in younger age-group. Rapid cycling could explain the failure of Li and an excellent response to CBZ (Ballenger, 1988).

In conclusion, clinicians should be aware that a rapid cycling bipolar disorder can present at a very early age, even without genetic predisposition. Early recognition and treatment with CBZ would prevent the ensuing educational and social disruption.

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