

Letter to the Editor**Attention Deficit /Hyperactivity Disorder Comorbid with Early Onset
Schizophrenia - a Report of Two Cases.**

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INTRODUCTION

Literature is largely silent on concurrent and life-time comorbidity between schizophrenia and attention deficit /hyperactivity disorder (ADHD).^{1,2} We report two children with ADHD who developed very early onset schizophrenia during their follow up.

CASE I

Miss SM was diagnosed as a case of congenital hypothyroidism with moderate mental retardation (IQ 45) at the age of 3.7 years and was maintained on thyroxin (125mcg/day). At 7.9 years of age, she was diagnosed to have attention deficit hyperactivity disorder (ADHD)-combined type (DSM IV; Kiddie Schedule for Affective Disorder and Schizophrenia-Parent version [K-SADS-P]) for which she was prescribed clonidine (150mcg/day [6mcg/kg/day]) alone for one year and then in combination with haloperidol (0.375mg/day) for the next 3 years. She was later shifted to methylphenidate (25 mg/day) when it became available in India in 1999. After about 6 months of this treatment, SM (12.4 years) became increasingly withdrawn and had to be coaxed and guided even for her daily chores. She was noted to maintain bizarre postures, display odd facial expressions, and indulge in stereotyped activities like finger twisting. Drooling of saliva, withholding of urine and occasional incontinence were also noted. Investigations including computerized tomography (brain) and thyroid function tests (TSH- 0.284 μ IU/ml, T4-123.3 nmol/l, T3-1.99 nmol/l) were normal. She was given an additional diagnosis of catatonic schizophrenia (DSM-IV; K-SADS-PL). Methylphenidate was tapered off. As she did not respond to 6-week (or greater) trials of quetiapine (500 mg/day) and aripiprazole (20 mg/day) and 10 electro convulsive therapies, she was prescribed clozapine (300 mg/day) and thyroxin (125 mcg).

CASE 2

Master MA was diagnosed as having mild mental retardation (IQ 60), primary enuresis, ADHD-combined type, and conduct disorder (with use of tobacco) as per DSM-IV (K-SADS-PL) at 11 years of age. He developed headache, sleep disturbance and pain in abdomen on methylphenidate (15 mg/day), so his parents stopped the medication within one month of its prescription. After 1 month of stopping methylphenidate, he developed abnormal behavior characterized by agitation, irrelevant talk, decreased sleep and appetite, visual and auditory hallucinations, and fearfulness. His psychotic symptoms improved within 2 weeks of treatment with olanzapine (10 mg/day) but he had several relapses over the year. Reassessment led to a diagnosis of undifferentiated schizophrenia (K-SADS-PL) and detrusor instability. His psychotic and ADHD symptoms responded to risperidone (6 mg/day) [co-prescribed with lorazepam (6 mg/day) and tryhexyphenidyl (4 mg/day)] and clonidine (5mcg/kg/day), respectively. Psychosocial interventions led to improvement in conduct problems and tobacco use. He was maintaining well on risperidone (4 mg/day) and clonidine (250 mcg/day) at one year follow up.

DISCUSSION

The two cases described above suggest that schizophrenia should be considered as potential lifetime comorbidity in children with ADHD.

The ADHD symptoms in these children were well documented during follow up to be more numerous and specific as compared to prodromal attentional and behavioral symptoms described in schizophrenia.³ It is also unlikely that the schizophrenic symptoms in these children were methylphenidate induced. Though the first patient was maintained on methylphenidate for 6 months she developed withdrawn behavior and catatonic symptoms rather than hallucinations, paranoid delusions and thought disorder described as adverse events of methylphenidate treatment. Also, she did not recover on discontinuation of the drug. In the second patient, psychotic symptoms emerged after one month of discontinuation of methylphenidate given for a short duration.

Poor outcome has been reported in schizophrenic children with history of ADHD in childhood.⁴ Such children are difficult to treat and require intensive treatment.

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