

## **IMIPRAMINE INDUCED ACUTE DYSTONIA IN A CHILD WITH ENURESIS NOCTURNA**

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Dear Editor;

It is well known that some drugs and neurodegenerative processes, such as Parkinson's disease, can cause extrapyramidal side effects (1). Extrapyramidal symptoms (ES) may be drug-induced and due affect tolerance and compliance (2). ES includes akathisia, parkinsonian symptoms (e.g. tremor, bradykinesia and muscle rigidity) and impaired involuntary movements (e.g. acute dystonia and tardive dyskinesia) (3). Especially, antipsychotic drugs therapy (4), antiemetics, and a variety of other drugs (5) can frequently cause severe occurrences and complications (4). Some drugs induced ES are thought to cause an imbalance of dopamine and acetylcholine in the nigrostriatal pathway(1). Tricyclic antidepressants (TCAs), such as amitriptyline, imipramine, desipramine, clomipramine and doxepine, may have antidopaminergic effect(2). However, antidepressant drugs are not directly acting as dopamine antagonists(6), but some movement disorders symptoms are rarely described as a side effect of tricyclic antidepressants(2).

Enuresis nocturna is a multidisciplinary problem worked on by such many physicians as pediatricians, urologists and child and adolescent psychiatrists (7) can cause a significant psychosocial problem for children and their parents (8), which is estimated at 3.8% to 25% (9). That is, there are over 50 million children with enuresis around the world (10). The aetiology of this condition is not totally known. Medical therapies including imipramine, desmopressin and anticholinergics, behavioural therapy and enuretic alarm devices are proposed to manage this condition(8). TCAs drugs are widely used in the process of managing this condition (11), for instance, Imipramine can reduce wetting in some children and young people (12).

Here we report a case of imipramine induced acute dystonia in an enuretic child. 8-year-old boy with severe torticollis was assessed in our outpatient clinic and. Beforehand, he had been diagnosed as enuresis nocturna by a child psychiatrist and was given imipramine 10 mg/day for treatment. After three days initiating imipramine 10 mg/day, he had severe muscular spasm on his neck. He had no psychiatric and neurological history. Physical examination, vital signs, serum chemistries, blood counts were within normal limits. He was only taking imipramine, and no other medication had been used during this three days. He was diagnosed with imipramine induced dystonia and biperiden 5 mg was administered intramuscularly. After 45 minutes, it was seen that torticollis was resolved and he was referred to child psychiatry for the treatment of enuresis nocturna.

Tricyclic antidepressant induced some extrapyramidal side effects have been described in the literature and these include buccal contractions, head, tongue, pharynx, face, arms and legs myoclonus, myoclonic jaw jerking disruption of speech, uncomfortable feeling in legs, inability to remain still, abnormal perioral movements (2). Imipramine induced dystonia reported only once in the literature (13). This side effect of imipramine induced probably occurs due to its effect that may play the role of imipramine-sensitized dopamine receptors, because dopamine 3 receptors may play an inhibitory role in motor activity (14)

In conclusion, imipramine is administrated widely in child population; therefore, the prescribers should be aware of this rare side effect since movement disorders may get complicated the treatment.

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