

## Nocturnal Enuresis Due to Methylphenidate Consumption

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### Dear Editor

Stimulant medications such as methylphenidate and dextroamphetamine are used to treat children with symptoms of hyperactivity disorder and attention deficit; these treatments have some unknown side effects such as irritability, flurry, insomnia, having nightmares, loss of appetite and weight loss [1].

Ghanizadeh reported a case of nocturnal enuresis in a 11-year-old boy that was given 20 mg of methylphenidate once daily due to hyperactivity disorder and attention deficit. This treatment resulted in nocturnal enuresis which was resolved after discontinuation of taking it. Forty five days later, after starting methylphenidate and reaching a dose of 20 mg, nocturnal enuresis appeared again. This problem was again resolved with discontinuation of taking the drug, the above procedure was repeated a third time after starting to take it [2].

The present study reports an 8-year-old child with hyperactivity disorder and attention deficit who was treated with methylphenidate at a dose of 2.5 mg twice daily. The dosage increased to 5 mg twice daily after three days. On the second visit within 2 weeks after the onset of taking the drug, the child's mother complained about nocturnal enuresis and claimed her son suffered from this problem just after starting this medication. Therefore, she stopped giving her son the drug. Automatically, the nocturnal enuresis in the child was resolved with discontinuation of the drug. The child was meticulously studied in terms of personal and family history of nocturnal

enuresis. The studies focused on the other reasons of nocturnal enuresis in the child, but no positive history of such a problem was found to justify the case. To control the symptoms of hyperactivity and attention deficit, the child was again treated with methylphenidate and three days after starting the medication, the child started bedwetting which was resolved with discontinuation of taking the drug. At this time, the child was treated with dextroamphetamines. While the symptoms of hyperactivity and attention deficit disorder disappeared by the treatment, no sign of nocturnal enuresis was seen with the treatment of this drug.

How the methylphenidate could cause nocturnal enuresis in what reported requires to be more precisely investigated. However, methylphenidate may stimulate urination reflex and caused more rapid reflexes in the presence of natural arousal of the bladder. Nocturnal enuresis caused by methylphenidate treatment may have various pathogenic conditions which are different from other nocturnal enuresis such as polyuria or increased detrusor muscle activity [2, 3].

### References

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