

Letter to editor / Editöre mektup**Oxybutynin abuse in an adolescent leading to psychotic symptoms  
(Bir ergende psikotik belirtilere neden olan oxybutynin kötüye kullanımı)****Derya ARSLAN,<sup>1</sup> Mehmet Akif CANSIZ,<sup>2</sup> Ali Evren TUFAN,<sup>2</sup> Yusuf ÖZTÜRK<sup>2</sup>**

Dear Editor,

Misuse of prescription or over-the-counter drugs leading to subjective distress and dysfunction is classified among drug use disorders (APA 2013). Anticholinergic abuse have been reported since 1980s; primarily among adults with serious mental disorders.<sup>1</sup> Abuse of anticholinergic agents among adolescents had not received consistent attention.<sup>1</sup> Oxybutynin is an anticholinergic used in treatment of enuresis, urinary frequency and urge incontinence.<sup>2</sup> It was thought to have low potential for abuse due to weak effects, although accumulating case reports of adult patients argue otherwise.<sup>3</sup> In Tukey, it was reported that two cases have oxybutynin addiction among prisoners.<sup>4</sup> The product information sheet reports a 13-year old male who presumably abused oxybutynin and alcohol but apart from this we are not aware of reports of its abuse by adolescents.<sup>2</sup> Post-marketing experience revealed psychotic symptoms and hallucinations as adverse effects of use.<sup>5</sup> Psychotic disorder due to oxibutine misuse has been shown in two cases in adults.<sup>6</sup> As far as we are aware there are no reports of chronic adolescent abuse of oxybutynin leading to psychotic symptoms. In this presentation, it was aimed to show that oxybutynin is a addictive potential which is common in young people and it is aimed to emphasize that severe side effects such as psychosis may occur in overdose situations

A 17 year-old male patient was brought by his parents with complaints of "anxiety, hearing voices of his friends and seeing them and excessive use of oxybutynin (Uropan®)". According to history, he started to use those by the advice of his friends to 'get high' one year ago and had been using them without cessation twice/ thrice per week. He reported a need for dose escalation to reach the initial euphoria. After 2-3 months of oxybutynin abuse he developed intermittent, ego-dystonic visual and audi-

tory hallucinations which persisted after intoxication and caused anxiety. Premorbid history and family history was unremarkable.

In mental status examination he was a well-groomed male adolescent with appropriate physical development. Thought processes were coherent and goal directed and content included his fears due to hallucinations and desire to stop oxybutynin abuse. Affect and mood were anxious. Laboratory evaluations including screening for other substances were negative. His PANSS and CGI-S scores at intake were 69 (positive: 22, negative: 15, general: 32) and 5 (markedly ill); respectively. He was diagnosed with 'other (or unknown) substance use disorder' as per DSM-5 and risperidone 1 mg/day was started. The dose was gradually titrated to 2 mg/ day and he was followed up with weekly visits. Hallucinations reduced with treatment while oxybutynin abuse stopped. At 6<sup>th</sup> week his PANSS and CGI-S scores were 39 (positive: 10, negative: 7, general: 22) and 4 (moderately ill); respectively.

Anticholinergic drugs have a number of neuropsychiatric effects, such as decreasing depressive-anxiety symptoms, causing euphoria, improving relaxation, ameliorating the parkinsonian symptoms and reducing the side-effects of antipsychotic treatments.<sup>1</sup> Although there are reports of oxybutynin addiction in the literature, the occurrence of a psychotic disorder thought to be due to oxybutynin is very rare.<sup>4,5</sup> and has not been shown in youth until this time. The abuse potential of those agents are increasingly recognized by adolescents. Although most of anticholinergic medication is controlled, oxybutynin could be obtained from pharmacies without prescription in Turkey. The legal arrangements about the drugs including anticholinergic agents should be updated quickly to prevent the drug abuse.

**REFERENCES**

1. Buhrich N, Weller A, Kevans P. Misuse of anticholinergic drugs by people with serious mental illness. *Psychiatr Serv* 2000; 51(7):928-929.
2. Product Information Sheet. [http://www.janssen.com/us/sites/www\_janssen\_com\_usa/files/products-documents/ditropanxl.pdf]. Accessed on 01.12.2016.
3. Can SS. A case of oxybutynin abuse. *Turk Psikiyatri Derg* 2015; 2:147-148.
4. Balasar M, Çiçekçi F. Oxybutynin addiction amongst prisoners: two case reports. *Anadolu Psikiyatri Derg* 2016; 17(3):77-79.
5. Gulsun M, Pinar M, Sabanci U. Psychotic disorder induced by oxybutynin: Presentation of two cases. *Clin Drug Investig* 2006; 26(10): 603-606.
6. Aydın O, Aydın PÜ. Oxybutynin induced psychosis. *Anadolu Psikiyatri Derg* 2016; 17(4):333-333.

<sup>1</sup> Department of Psychiatry, <sup>2</sup> Department of Child and Adolescent Psychiatry, Abant İzzet Baysal University Medical Faculty, Bolu, Turkey

E-mail: yusuf26es@hotmail.com