



High dose aripiprazole induced double incontinence

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ABSTRACT

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There is a limited reported manuscript in the literature about signs and symptoms after the usage of high-dose aripiprazole. Here, we report suicide case with the usage of 70 mg aripiprazole who developed double (urinary and fecal) incontinence.

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1. Introduction

Aripiprazole is a second generation antipsychotic agent with a partial agonistic action on dopamine D₂ receptors (Lieberman, 2004). The molecule is used in treatment of schizophrenia and bipolar disorder; it's also used as an augmentation therapy in several depressive disorders with a partial response to antidepressant treatment (Berman et al., 2009). Symptoms and signs associated with overdose of aripiprazole are reported as nausea, vomiting, asthenia, diarrhea, somnolence and rarely, urinary incontinence (Potkin et al., 2003).

In this article, a patient referring with urinary and fecal incontinence after ingestion of high dose aripiprazole and escitalopram whose symptoms resolved within 16 hours will be presented.

2. Case report

Patient's case history was based on personal reports and explanations of family members as well as observations of emergency care unit team members. Thirty one year-old female patient, treated and followed up in psychiatry outpatient clinic with a diagnosis of depression, was brought to emergency care outpatient clinic by her family. We were informed that she ingested high dose of drugs for suicidal purposes (20 tablets escitalopram 10mg and 14 tablets aripiprazole 5mg) approximately four hours prior to referral to our hospital. Initial examination revealed that patient is conscious and fully oriented. Patient was uncommunicative and expressed suicidal ideas in thought content. Self care was assessed as satisfactory and she cooperated with members of treatment team. Patient informed that she experienced urinary

and fecal incontinence approximately two hours after the suicide attempt; urinary and fecal discharge was also detected during clinical observation. Vital signs were normal and no pathological findings were detected in electrocardiogram. Gastric lavage was performed and active charcoal was administered. Patient was monitored in emergency intensive care unit for 24 hours. After a period of approximately 16 hours, symptoms of urinary and fecal incontinence abated and patient was hospitalized in psychiatry clinic following psychiatric consultation. Symptoms of urinary and fecal incontinence were not observed during stay in psychiatry clinic. Clinical findings were thought to be associated with ingestion of aripiprazole 5mg, received as 70 mg in a single dose.

3. Discussion

Though a rare occasion, urinary and fecal incontinence (dual incontinence) associated with antipsychotics was reported in literature. Several case reports present cases of dual incontinence associated with use of atypical antipsychotics like olanzapine (Sagar et al., 2005), clozapine (Mendhekar and Duggal, 2007) and risperidone (Hergüner and Mukaddes, 2008) in particular. However, to the best of our knowledge, there are no case reports on urinary or fecal incontinence associated with aripiprazole up to this date. The case presented in this article represents the first case, reporting dual incontinence induced by aripiprazole.

It was stated that antipsychotic agents may lead to urinary and fecal incontinence (Ambrosini and Nurnberg, 1980; Ambrosini and Nurnberg, 1982) and although the exact mechanism is not understood yet, these findings

were suggested to be associated with alpha adrenergic actions in general, while they were partly associated with central dopaminergic effects and to a much lesser extent, with cholinergic effects (Clark, 2003). These findings may develop within hours of ingestion of antipsychotic agents or alternatively, they were reported to be observed weeks after the initiation of treatment (Clark, 2003; Hergüner and Mukaddes, 2008). No cases of incontinence associated with quetiapine and aripiprazole was reported in literature up to this date; this may be related with lower rate of alpha adrenergic side effects of these two agents, as compared to other antipsychotics. It may well be stated that incontinence is not expected in normal therapeutic doses of these agents. However, ingestion of high dose of aripiprazole in our patient for suicidal purposes may have led to development of alpha adrenergic side effects. Another possible mechanism for dual incontinence in our case is a state of unknown drug interaction associated with co-ingestion of aripiprazole and escitalopram. Dual incontinence fully resolved after 16 hours following withdrawal of drug administration. Therefore, it may be stated that incontinence associated with aripiprazole is of short-duration and resolves spontaneously without any intervention.

Based on the presented case, it may be emphasized that use antipsychotics or ingestion of high doses of antipsychotics should be considered in patients, referring to emergency care units with urinary and fecal incontinence. In patients referring with dual incontinence and a history of use of any antipsychotic agent, clinical observation may be sufficient in terms of incontinence.

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