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CASE REPORT



Long-acting injectable aripiprazole-induced akathisia

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ABSTRACT

Aripiprazole is the atypical antipsychotic which has lesser extrapyramidal side effects. Aripiprazole once monthly was recently developed as a long-acting injection (LAI) for intramuscular administration. We presented a case that developed akathisia after the first LAI of aripiprazole. The akathisia symptoms occurred after the first dose of LAI and there was not any sign of akathisia during his oral treatment with aripiprazole. The clinicians should manage the administration of LAI carefully and observe the possible side effects.

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KEYWORDS

Aripiprazole; akathisia; injection

Introduction

Aripiprazole is an atypical antipsychotic that is widely acknowledged as having low propensity for extrapyramidal side effects [1]. Previous preclinical studies have provided evidence that aripiprazole has potent partial agonist activity at dopamine D2 and 5-HT1A receptors and antagonist activity at 5-HT2A receptors [2]. Since its pharmacological profile differs from other atypical antipsychotics, it was initially considered to produce lesser side effects and movement disorders. However; currently, there is a growing body of evidence in the form of case reports of aripiprazole reporting that it induced movement disorders such as tardive dyskinesia, parkinsonism, akathisia, and dystonia [3]. Now aripiprazole once monthly was recently developed as a long-acting injection (LAI), in the form of a suspension of lyophilized aripiprazole reconstituted with an aqueous diluent, for intramuscular administration. We presented a case that developed akathisia after the first LAI of aripiprazole.

Case presentation

A 22-year-old man, who has been undergoing schizophrenia treatment for 4 years, was started on risperidone injection 50 mg/2 weeks first, after 3 years switched to paliperidone injection 100 mg/month. During this treatment he was suffering from sexual dysfunctions because of the hyperprolactinemia. His treatment was switched to oral aripiprazole 30 mg/day with cross tapering. After 4 months with oral aripiprazole medication his prolactin level was in the normal range. Accordingly, we decided to shift to the long-acting injectable aripiprazole 400 mg/month because of the high probability of oral treatment discontinuation.

We intended to continue oral treatment for 14 days after the first injection. After two days from the first injection he developed akathisia. He could not sit at one place due to agitation and experienced severe restlessness along with a pain in the leg. Furthermore, he could not fall asleep at night. His global score on Barnes Akathisia Rating Scale was 4 indicating strong akathisia. In this regard, the oral aripiprazole medication was stopped immediately and propranolol 40 mg/day was added into the treatment regimen. The patient's symptoms did not disappear and then clonazepam 2 mg/day was added. His akathisia symptoms became weaker after adding these medications. Akathisia symptoms disappeared totally in 5 days and the additional medications were stopped progressively. There was not any sign of akathisia during the second and third injections of the drug.

Discussion

Previous research has also suggested that using oral aripiprazole in schizophrenia cases should be fully considered [4]. According to prescribing information, in conjunction with first dose of LAI, the patient should take 14 consecutive days of concurrent oral aripiprazole or current oral antipsychotic. In our case akathisia symptoms occurred after the first dose of LAI. In fact the patient received both oral aripiprazole and LAI but oral aripiprazole treatment was started 4 months ago and there were not any signs of akathisia during his oral treatment. In this regard, we consider that the aripiprazole injection might cause the akathisia symptoms. However, the clinicians should manage the administration of first LAI and oral aripiprazole combination carefully and observe the possible side effects of the LAI as oral aripiprazole medication.

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Disclosure statement

No potential conflict of interest was reported by the authors.

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