



**ARIPIRAZOLE INDUCED TARDIVE DYSKINESIA**

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**ABSTRACT**

Tardive Dyskinesia is an undesirable side effect of antipsychotic drugs. Obvious evidences clarifying its pathophysiology is not established yet. Aripiprazole is not known to be as often as possible associated with Tardive Dyskinesia. Here we are reporting a case who developed Tardive Dyskinesia during its use.

**KEYWORDS:** Aripiprazole, Tardive Dyskinesia, Abnormal

involuntary movement scale.

**INTRODUCTION**

Tardive Dyskinesia is involuntary movements of the tongue, lips, face, body, and extremities that occur in patients treated with long-term dopaminergic antagonist medications.<sup>[1]</sup> Several typical antipsychotics specially Haloperidol, Pimozide, Thioridazine and Trifluoperazine etc. are known to cause this unwanted side effect. Among the atypicals Olanzapine, Amisulpiride and Paliperidone are known to cause Tardive Dyskinesia.<sup>[1]</sup> Other than antipsychotic drugs like Metochlorpramide, Bipiriden, Procyclidine, Fluoxetine, Sertraline, Trazodone, Amitriptyline, Carbamazepine, Phenytoin etc. are reported to cause dyskinetic movements.<sup>[1]</sup> Tardive Dyskinesia was first named and classified in 1964.<sup>[2]</sup> By the early 1960s, symptoms associated with Tardive dyskinesia were apparent in approximately 30 percent of psychiatric patients treated with antipsychotic medications, linking the development of the condition to these drugs.<sup>[2]</sup> Being female, old age, diabetes mellitus are the known risk factors for Tardive Dyskinesia.<sup>[1,3]</sup> The atypicality in the mechanism of action of Aripiprazole is its action as a dopamine partial agonist, which favors it as having low propensity for extra pyramidal

symptoms.<sup>[4]</sup> Tardive Dyskinesia with Aripiprazole is not a frequent phenomenon. Supportive literatures in this regard are less.<sup>[6-8]</sup> Here we have depicted a case of Tardive Dyskinesia with the use of Aripiprazole.

### CASE HISTORY

A 65 years old woman was a known case of paranoid schizophrenia used to attend our OPD for her regular follow-up. But one day her attendant complained of noticing some involuntary movement of her tongue throughout the whole day. In reviewing her medical records it had been found that she was suffering from paranoid schizophrenia for the last 10 years with on and off antipsychotic coverage. Her file records uncovered that initially she was on tablet Olanzapine 20 mg but as she developed type 2 diabetes mellitus she had been shifted to Aripiprazole 10 mg. So for the last 5 months she had been receiving tablet Aripiprazole 15 mg. She was maintaining well with these medications and had attained a phase of complete remission. But for the last 1 month she had been showing an involuntary movement of her tongue. The involuntary movement was rotating type and it involved only her tongue sparing her lips and facial muscles. On inquiring patient's perception regarding her problem, she revealed that she could temporarily resist the trend, but it again used to reappear after sometimes. Oral examination did not bring out any abnormality or use of any denture. Looking at the whole scenario she was diagnosed to be having Tardive Dyskinesia. Abnormal involuntary movement scale (AIIMS) scale<sup>[5]</sup> was administered and it was found to be severe (score 4) in the domain of tongue movement. Tablet Aripiprazole had been stopped and she was shifted to Quetiapine 100mg and titrated up to 300 mg. She was found to be maintaining well in her subsequent visits and during her recent visit her score was 1 (minimal movement) revealing that she had been showing improvement in after discontinuation of the culprit drug.

### DISCUSSION

Tardive Dyskinesia with Aripiprazole is not usually seen most probably due to its atypicality in the mechanism of action.<sup>[4]</sup> Just modest bunches of studies have reported association of Tardive Dyskinesia with Aripiprazole.<sup>[6-8]</sup> Abbasian and Power demonstrated tardive dyskinesia in case of 24 year old lady receiving Aripiprazole for duration of 9 months.<sup>[6]</sup> Through their report they have recommended vigilance regarding all the possible side effects of antipsychotics ignoring the class to which it belongs.<sup>[6]</sup> Maytal et al., reported Tardive dyskinesia in a case of refractory depression with 18 months of use of Aripiprazole at a dose of 15 mg/day and the involuntary movements were seen to be improving upon

discontinuation of the drug.<sup>[7]</sup> Study, which was reported by Pena et al., revealed buccolingual stereotypic movement in patients receiving Aripiprazole.<sup>[8]</sup> They stated that 3.4% of patients who were getting Aripiprazole developed Tardive dyskinesia. However study reports demonstrating Aripiprazole induced Tardive Dyskinesia are scarce. In our case also the patient had developed Tardive Dyskinesia after an exposure of 5 months with the drug. Various risk factors like being female, old age, diabetes mellitus etc. are playing roles in our case too. So here we recommend studies are to be conducted on a large scale to reveal the definite propensity of Aripiprazole to cause Tardive dyskinesia.

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#### **CONFLICT OF INTEREST: NIL**

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