

## Video Abstracts

# Parkinsonism and Belly Dancer Syndrome in a Patient with Schizophrenia

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#### Abstract

Background: Belly dancer syndrome (BDS) and parkinsonian features are rarely described in association as a drug-induced movement disorder.

**Phenomenology shown:** A 62-year-old woman with paranoid schizophrenia presented with bradykinesia, rigidity, rest, and postural tremor, as well as dyskinetic abdominal movements.

**Educational value:** Our case highlights that drug-induced parkinsonism can be associated with other rare movement disorders, such as BDS, with subsequent greater morbidity.

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Ethics Statement: All patients that appear on video have provided written informed consent; authorization for the videotaping and for publication of the videotape was provided.

Belly dancer syndrome (BDS) is a dyskinetic writhing involuntary movement of abdominal muscles, usually slow, rhythmic, and repetitive, sometimes painful.<sup>1</sup> This condition may be associated with peripheral or central nervous system injuries, such as abdominal surgery and pontine or spinal cord lesion, respectively, as well as antidopaminergic drugs (drug-induced).<sup>2</sup>

A 62-year-old woman with paranoid schizophrenia, on haloperidol and risperidone for the previous 20 and 1 years, respectively, developed parkinsonism, and within 6 months also tardive dyskinesia (TD) features (oromandibular and abdominal dyskinesias) (Video 1).

Our patient exhibited, after exposure to dopamine antagonists, parkinsonism and BDS. The pathogenesis of drug-induced BDS, a kind of TD, theoretically is related to nonphysiological stimulation of postsynaptic dopaminergic receptors, generating an imbalance of movement control.<sup>2</sup> A dopamine receptor hypersensitivity in TD is based on transitory improvement of symptoms with increased antipsychotic dose or use of drugs, such as tetrabenazine, that leads to decrease of dopamine levels.<sup>3</sup>



Video 1. Bradykinesia, Oromandibular Dyskinesia and Belly Dancer Syndrome. The patient presents here a masked face, global bradykinesia and rest tremor (parkinsonian features) as well as dyskinetic movement of abdominal muscles (Belly Dancer Syndrome).

BDS is an unusual manifestation of TD that was present with parkinsonism in our patient, resulting in greater morbidity. They share the same treatment strategy, which is based on withdrawal of the involved drug and leads to improvement of parkinsonian features, with a variable response of TD/BDS.

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