Review Article

Gastrointestinal dysfunction in idiopathic Parkinsonism: A narrative review

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Currently, gastrointestinal (GI) dysfunctions in Parkinson's disease (PD) are well-recognized problems and are known to be the initial symptoms in the pathological process that eventually results in PD. Many types of PD-associated GI dysfunctions have been identified, including weight loss, nausea, hypersalivation, dysphagia, dyspepsia, abdominal pain, intestinal pseudo-obstruction, constipation, defecatory dysfunction, and small intestinal bacterial overgrowth. These symptoms can influence on other PD symptoms and are the second most significant predictor of the quality of life of these patients. Recognition of GI symptoms requires vigilance on the part of clinicians. Health-care providers should routinely ask direct questions about GI symptoms during office visits so that efforts can be directed at appropriate management of these distressing manifestations. Multiple system atrophy (MSA) and progressive supranuclear palsy are two forms of neurodegenerative Parkinsonism. Symptoms of autonomic dysfunctions such as GI dysfunction are common in patients with parkinsonian disorders. Despite recent progress in the recognition of GI dysfunctions, there are a few reviews on the management of GI dysfunction and GI symptoms in idiopathic Parkinsonism. In this review, the clinical presentation, pathophysiology, and treatment of each GI symptom in PD, MSA, and prostate-specific antigen will be discussed.

Key words: Multiple system atrophy, Parkinson's disease, progressive supranuclear palsy

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INTRODUCTION

In addition to the cardinal motor features of the disorder, Parkinson's disease (PD) patients suffer from a range of nonmotor symptoms, of which gastrointestinal (GI) symptoms are among the most common. GI motility is commonly disturbed in PD, manifesting as some GI symptoms. All these symptoms may precede the clinical diagnosis of PD for years.[1] The most common GI symptoms in PD are weight loss, sialorrhea, dysphagia, nausea, constipation, and defecatory dysfunction, all of which reflect dysregulation of GI motility at all levels of the GI tract. Recent studies have highlighted that there is an association with disease severity and motor status and the impact on patients' health-related quality of life (HRQL).[2] Furthermore, GI symptoms have been associated with severe and potentially life-threatening complications, including malnutrition, pulmonary aspiration, megacolon, intestinal obstruction, and even perforation. Finally, they can impact on other PD symptoms. For example, slow gastric emptying decreasing levodopa bioavailability contributes to motor fluctuations in PD. Recognition of GI symptoms requires vigilance on the part of clinicians. There is a paucity of clinical trial data to guide the treatment of GI dysfunction in PD. Some recent trials have provided evidences for symptomatic treatment of hypersalivation, constipation, dysphagia, nausea, and also defecatory dysfunction.[3] Multiple system atrophy (MSA) is defined as an adult-onset, sporadic, rapidly progressive, multisystem, neurodegenerative fatal disease of undetermined etiology, characterized clinically by varying severity of parkinsonian features; cerebellar, autonomic, and urogenital dysfunction and corticospinal disorders.[4] It is one of the neurodegenerative forms of Parkinsonism. In the

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