

Is it Just Shoulder Pain or Insidious Foot Step of Parkinson'S Disease? A Mini-review of the Literature

Degirmenci E¹ and Degirmenci Y^{*2}

¹Duzce University Faculty of Medicine, Orthopaedics and Traumatology Department, Duzce, Turkey

²Duzce University Faculty of Medicine, Neurology Department, Duzce, Turkey

*Corresponding author: Degirmenci Y, Assoc Prof, MD, Duzce University Faculty of Medicine, Neurology Department, Duzce, Turkey, Tel: +90380 542 13 90, 05309338686, E-mail: ydegir@gmail.com

Citation: Degirmenci E, Degirmenci Y (2018) Is it Just Shoulder Pain or Insidious Foot Step of Parkinson'S Disease? A Minireview of the Literature. J Parkinson Ther 1(1): 101

Abstract

Parkinson's disease (PD) is a chronic, disabling hypokinetic movement disorder with a broad spectrum of symptomatology including motor and non-motor complaints. Since non-motor symptoms of the disease such as musculoskeletal pain including shoulder pain is often underestimated, and is prone to occur during the course of the disease, as well as the prodromal phase of PD, it is important to keep in mind that shoulder pain may be a foot step of an evolving PD, and may need further investigation in terms of PD

Keywords: Parkinson's disease; Non-motor symptoms; Shoulder pain

Mini Review

Parkinson's disease (PD) is a chronic, progressive, multisystem neurodegenerative disorder characterized with cardinal motor features including bradykinesia, rigidity, rest tremor and postural instability, as well as the non-motor symptoms like mood disorders, sleep problems, autonomic disturbances, smell impairments, and musculoskeletal complaints, and pain [1]. Pain is one of the most common musculoskeletal, non-motor symptoms of PD, that can manifest as shoulder and/or back pain. Additionally, shoulder disorders like frozen shoulder, bursitis, and rotator cuff lesions are more likely to occur in patients with PD [1]. The frequency and severity of shoulder pain and disorders are not clearly reported, yet. However, in a previous retrospective study, Stamey *et al.*, reported the frequency of shoulder pain in patients with PD as 11% [3]. Moreover, among these patients, 20% of them stated that, their shoulder pain showed up years before the motor symptoms occurred, which can be taken into account as a preceding symptom of PD [3]. On this aspect, Stamey *et al.*, reported that shoulder pain is most often underestimated or under recognized as a symptom of PD, and commonly misdiagnosed. This ignorance or unawareness of shoulder pain as a possible presenting symptom of PD, when it is asymmetrical in particular, may delay the diagnosis and the treatment of this progressive disease as well [3].

As the imaging techniques such as ultrasound improved over time, and became gradually popular in the evaluation of musculoskeletal pain and its' etiologies, Koh *et al.*, demonstrated that 22 among 33 PD patients had abnormal ultrasound findings compatible with a tendon tear in the clinically dominant side of PD. Besides, 9 patients had frozen shoulder [4]. Since the number of studies assessing the temporal relationship of shoulder pain and PD are limited, further randomized studies either retrospective or prospective, with large number of PD patients are needed. However, overall review of the literature suggests not only neurologists, but also other clinicians including orthopedic surgeons, physiotherapy specialists to keep in mind that shoulder pain can either be a sensory symptom of a patient who have already got the diagnoses of PD, or can occur in the prodromal phase of the disease, which may encounter years before the diagnosis as an insidious symptom of an evolving PD, and needs a detailed neurological examination [2]. Thus it may help the clinicians of various specialties who deal with shoulder pain to recognize and approach this complaint not only as a musculoskeletal symptom, but also provide insight as a possible non-motor symptom of PD via leading the patient to a detailed neurological examination, and early diagnosis of a possible PD.

References

1. Quinn NP (1997) Parkinson's disease: Clinical features. *Baillieres Clin. Neurol* 6:1-13.
2. Jankovic J (2008) Parkinson's Disease: Clinical features and diagnosis. *J Neurol Neurosurg Psychiatry* 79: 368-76.
3. Stamey W, Davidson A, Jankovic J (2008) Shoulder Pain: A Presenting Symptom of Parkinson Disease. *J Clin Rheumatol* 14: 253-4.

4. Koh SB, Roh JH, Kim JH, Oh K, Kim BJ, et al. (2008) Ultrasonographic findings of shoulder disorders in patients with Parkinson's disease. *Mov Disord* 23: 1772-6.

Submit your next manuscript to Annex Publishers and benefit from:

- ▶ Easy online submission process
- ▶ Rapid peer review process
- ▶ Online article availability soon after acceptance for Publication
- ▶ Open access: articles available free online
- ▶ More accessibility of the articles to the readers/researchers within the field
- ▶ Better discount on subsequent article submission

Submit your manuscript at
<http://www.annexpublishers.com/paper-submission.php>