

# Parkinson's disease – 200 years: the outstanding contribution of “Old Hubert”

Doença de Parkinson – 200 anos: a notável contribuição do “Velho Humberto”

Hélio A. G. Teive<sup>1</sup>, Renato P. Munhoz<sup>2</sup>, Andrew J. Lees<sup>3</sup>

## ABSTRACT

Two hundred years after the publication, of “*An Essay on the Shaking Palsy*”, this indisputable landmark in our understanding of the nature of Parkinson's disease still remains. What is frequently overlooked, however, is the originality of James Parkinson's ideas about how clinical observations could be segregated into diagnostic entities. Parkinson was a surgeon apothecary with wide ranging interests outside medicine including geology and paleontology. He was also a strong campaigner for social change and a political pamphleteer, writing under the *nom de plume* of “*Old Hubert*”.

**Keywords:** Parkinson's disease; history.

## RESUMO

A publicação de James Parkinson intitulada “*An Essay on the Shaking Palsy*”, 200 anos atrás, é considerada uma obra prima de fundamental importância científica. James Parkinson foi um cirurgião apotecário com uma ampla faixa de interesses, além da medicina, incluindo geologia e paleontologia. Ele foi também um grande reformador social e panfletário político, que escreveu sob o pseudônimo de “*Velho Humberto*”.

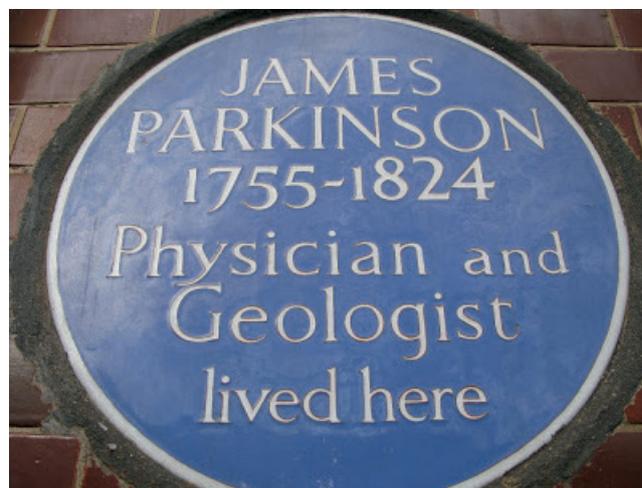
**Palavras-chave:** doença de Parkinson; história.

Parkinson's disease (PD) is the second most common neurodegenerative disorder, after Alzheimer's disease, and the most common hypokinetic movement disorder<sup>1</sup>. Besides the classical motor features, including bradykinesia, rigidity, tremor at rest and postural instability, autonomic, psychological and sensory symptoms are also commonly reported<sup>1,2</sup>. Furthermore, accurate diagnosis depends, as it did when Parkinson wrote his monograph in 1817, on clinical acumen and semiotics<sup>3</sup>. The patients that we diagnose with Parkinson's disease today would have been instantly recognizable to Parkinson and Jean-Martin Charcot, the father of neurology, who suggested “*la maladie de Parkinson*” as a more suitable rubric than paralysis agitans. In this historical review we contextualize the contribution of James Parkinson in relation to our modern notion of Parkinson's disease<sup>3</sup>.

## “OLD HUBERT”

James Parkinson was born on April 11<sup>th</sup> 1755, in London, UK, where he lived and worked as an apothecary at 1 Hoxton

Square in the Shoreditch district (East London) (Figure 1)<sup>4,5,6</sup>. During the years 1793-1795, he also wrote several political pamphlets, under the pseudonym “*Old Hubert*”, most of



(Extracted from Google Images: spitalfieldslife.com, October, 01, 2016).

**Figure 1.** James Parkinson's house at 1 Hoxton Square, London, UK.

<sup>1</sup>Universidade Federal do Paraná, Hospital de Clínicas, Departamento de Medicina Interna, Unidade de Distúrbios do Movimento, Serviço de Neurologia, Curitiba PR, Brasil;

<sup>2</sup>University Health Network, Toronto Western Hospital, Morton and Gloria Shulman Movement Disorders Centre and the Edmond J. Safra Program in Parkinson's Disease, Toronto, Ontario, Canada.

<sup>3</sup>UCL and the National Hospital for Neurology and Neurosurgery, Reta Lila Weston Institute for Neurological Studies, Institute of Neurology, Queen Square, London, UK.

**Correspondence:** Hélio A. G. Teive; Rua General Carneiro 1103/102; 80060-150 Curitiba PR, Brasil; E-mail: hagteive@mps.com.br

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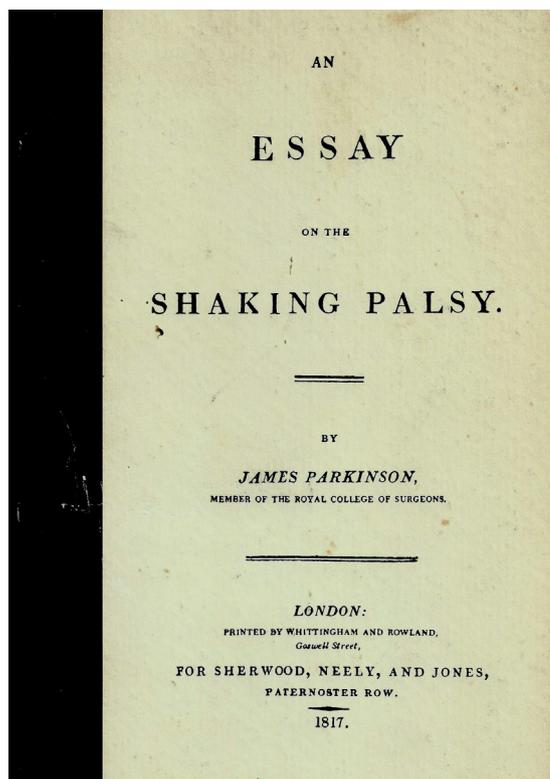
them criticizing the political system and the government<sup>4,5</sup>. One of the most famous was *“Revolutions without Bloodshed; or, Reformation preferable to Revolt”*, published in 1784<sup>4,5</sup>. James Parkinson was a member of both the London Corresponding Society and the Society for Constitutional Information. He was liberal in his political viewpoint and perhaps, if he had been alive today, would have supported the ‘Green Party’. He campaigned strongly for parliamentary reform, better care for the mentally ill and extension of suffrage<sup>4,5,7</sup>. Historical data are dubious whether he was also involved in the very famous “Pop-Gun Plot” to assassinate King George III. Between 1799 and 1800, James Parkinson penned several publications designed to be read by his patients such as *“Medical Admonitions to Families”*, *“The Villager’s Friend & Physician”*, *“Dangerous Sports”*, *“Observation on the Nature and Cure of Gout”*, and *“The Hospital Pupil”* (1800).<sup>4</sup> He died in 1824 and was buried at St Leonard’s Church not far from where he had lived all his life<sup>4,5</sup>.

## ESSAY ON THE SHAKING PALSY

It is not known what motivated Parkinson to write The Essay other than that he felt that a distinct and relatively easily recognizable clinical syndrome had slipped the nosologists net. His slim monograph (66 pages) includes a scholarly review of the literature, a clinical description of six patients (all of them male, with ages ranging from 50 to 72 years), three of whom were his patients, two of whom he had watched in the streets and later examined and one whom he had observed on his travels through the Hoxton streets (*“the lamented subject of which was only seen at a distance”*)<sup>3</sup> (Figure 2). In the preface, he sets out his intention to give a clinically based description of the disease, and encourages the great anatomists, like John Hunter, to carry out a detailed examination of the brain<sup>3</sup>. In chapter one (Definitions – History-Illustrative Cases), Parkinson provides a resume at the start of the chapter, which he considers encapsulates the principal features of the *“Shaking Palsy”* (*“Paralysis Agitans”*):

*“Involuntary tremulous motion, with lessened muscular power, in parts not in action and even when supported; with a propensity to bend the trunk forwards, and to pass from a walking to a running pace: the senses and intellect being uninjured”*<sup>3</sup>.

He also draws attention to the fact that, while others had previously used the term paralysis agitans, he considered that term to have been used indiscriminately. He then gives a comprehensive account of the illness in a typical patient followed by clinical vignettes of the six cases<sup>3</sup>. In chapter two (Pathognomonic Symptoms Examined – Tremor Coactus – Scelotyrbé Festinans), he emphasizes that the two main components of the malady had previously been described as if they were distinct diseases<sup>3</sup>. In chapter three (Shaking Palsy), he further discusses the



(From the authors' book collection)

Figure 2. “An Essay on the Shaking Palsy” – James Parkinson, 1817.

differential diagnosis and emphasizes the importance of trembling at rest<sup>3</sup>. Chapter four (Proximate Cause – Remote Causes – Illustrative cases), Parkinson comments about the possible etiology of *“Shaking Palsy”* is less coherent to the modern reader, but it is here that he speculates the pathology may lie in the upper cervical cord with rostral extension. Additionally, there is an extensive discussion about clinically important symptoms and signs of *“Shaking Palsy”*<sup>3</sup>. In chapter five (Considerations Respecting the Means of Cure), Parkinson reviews the limited therapeutic options available for what he considers an incurable malady but expresses hope that disease-modifying treatments might be found before too long<sup>3,8</sup>. More than half a century after Parkinson’s essay, Charcot, the head of the Neurology Service at the Salpêtrière hospital in Paris, France, and the most celebrated neurologist of the XIX century, suggested the eponymous term *“la maladie de Parkinson”*<sup>9,10</sup>. Charcot disliked the term *shaking palsy* because he had demonstrated in his Tuesday lectures that patients with the malady had normal strength, and drew attention to the fact that there were some cases where rest tremor was absent, such as the celebrated ‘Bach’. Charcot also drew attention to muscular stiffness as an important, and almost invariable, physical sign and remarked on the frozen facial expression and drooling of saliva<sup>9,10</sup>.

## CONCLUSION

Two hundred years after James Parkinson’s seminal description of the shaking palsy, the medical profession now recognizes

the malady he described as a discrete clinicopathological entity. Although emphasizing the cardinal motor features of rest tremor, postural deformity and 'weakness', Parkinson also described constipation, urinary dysfunction, delirium and depression. Before denigrating the incompleteness of his clinical

observations, it needs to be recalled that he practiced at a time when physical examination of the nervous system, as is carried out today, was not performed and that the natural history of his disease has now been modified by the introduction of l-dopa and greater life expectancy of patients.

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