
PARKINSON DISEASE: A PROPOSAL FOR AN INTERVIEW PROTOCOL

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ABSTRACT

The aim of this study was to describe an instrument for specific interview in order to collect clinical history in patients with Parkinson's Disease and discuss its use in 30 subjects of both sexes, aging from 47 to 89 years old. On the evaluated symptoms, tremor during a movement presented bigger evolution followed by sialorrhea, tremor without movement, skin, voice and swallowing disorders. Such aspects point to the need of speech, swallowing and hearing follow-up, considering that most symptoms which presented important evolution involve directly speech, hearing and swallowing manifestations. The results showed that this instrument allowed data standardization, making possible the comparison of clinical evolution of a patient or between patients.

KEY WORDS: Parkinson's Disease; anamnesis; clinical evolution

INTRODUCTION

Parkinson's Disease was first described in 1817 by James Parkinson and presently is defined as an idiopathic degenerative neurological disturbance affecting both men and women mostly after the

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5th decade (CAMBIER et al., 1988; KNOLL, 1993; ADAMS; VICTOR, 1996). It has an insidious and slow onset. The diagnosis is made in presence of muscle stiffness, bradykinesia, tremor at rest and postural disturbances (PINEDA et al., 1988; JACOBS, 1995; MICHELI e FERNANDEZ, 1996; RAO et al. 2003).

As the disease progresses the patient tends to decrease activities restricting his/her fine and global motor activities. At this point the disease tends to progress more markedly. From the phonoaudiological point of view it is predicable a variability of compromise along the evolutive process, which will interfere in the communication and in all aspects of his/her life. This variability refers mostly to the neuromotor disturbances affecting the stomatognathic system, influencing in speech, voice, deglutition and linguistic abilities compromising communication (FLINT et al., 1993; GAMBOA, et al., 1997; LAMÔNICA et al. 1997; LIMONGI, 1998; GAMBOA, 2001; KNOOP; PADOVANI, 2001; VOLONTÉ et al. 2002; DIAS; LIMONGI, 2003).

Taking into consideration the clinical evolution of Parkinson's Disease and the need for interdisciplinary care, the aim of this study was to present an specific protocol of anamnesis aiming to obtain information on the initial and present manifestations, evolution, treatment and perception of patients and their families on the disease. Furthermore, the instrument will permit the standardization of data that can be used by members of the interdisciplinary team for comparison of one patient or among patients.

METHODS

This study is part of a wider investigation of phono audiologic manifestation in patientes carrying Parkinson's Disease conducted in the Clinics for Health Education of the University of the Sacred Heart (CEPS/USC) with financial support from CNPq. All ethical requirements were followed.

The elaboration of the protocol was based in the symptomatology described in the literature and was then applied to 30 individuals with diagnosis of Parkinson Disease made by neurological evaluation.

The contact with participants and/or parents was made by means of a consultation to the Basic Health Units of the Municipality, Municipal Program of Elderly Care (PROMAI), Physical Therapy Clinics of the University of the Sacred Heart and doctors specialized in neurology, gerontology and general practitioners.

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Fifty-four individuals were contacted, which underwent neurological evaluation, and Parkinson Disease was diagnosed in 41 cases. The others had neurological significant signs of the disease and/or other neurological disturbances but were not eligible to the present study. Out of the 41, eleven cases were rejected for personal reasons, dependence on others and/or worsening of the neurological condition.

The final sample included 30 individuals with Parkinson's Disease, 19 males (63.3%) and 11 females (36.7%) with age ranging from 47 to 89 years old and a varied social, economic and cultural condition. The presence of symptoms varied from one to 15 years.

The caring family member and the diseased individual participated in the anamnesis session answering the proposed protocol.

The study followed criteria of descriptive statistic related to the absolute and relative frequency of data collected in the protocol (see ANNEX).

RESULTS AND DISCUSSION

TABLE 1 shows the decade of life for the beginning of the disease as reported by participants. The decade with greater occurrence was above 50 years (80%) what is corroborated by Cambier (1988); Berlow (1989); Knoll (1993), Adams et al. (1996) and Rao et.al. (2003).

TABLE 1 - Decade for the first symptoms

Decade	N	%
Above 60	2	6.7
50 - 60	24	80
47 - 50	4	13.3
Total	30	100

TABLE 2 shows the evolution of the motor symptoms. In all cases (100%) the manifestations started in one hemi-body morning progressively to both sides in 60% of the cases. It should be stressed that this is due to the different periods of evolution of the sample. This progression makes patients lose their motor autonomy and functions in the personal and social aspect with interference in the quality of life. The literature mentions these data as part of the symptomatology (CAMBIER et al. 1998; RAO et al., 2003).

TABLE 2 - Compromised side at initial and present disease

	Initial		Present	
	N	%	N	%
R hemibody	16	54	7	23
L hemibody	14	46	5	17
Both	0	0	18	60
Total	30	100	30	100

The triad of symptoms checked in the literature was also cited in the declaration of the participants (TABLE 3). Presently, they reported symptoms of bradkynesia (86.6%), muscular stiffness (76.6%) and tremor (100%). In the investigated literature Silva (1974); Longo (1988); Barbosa (1989); Brown (1994); Cardoso (1994); and Adams et al. (1996) described that in Parkinson's Disease the clinical condition characterizes by bradkynesia, muscular stiffness and tremor.

TABLE 3 – Signs and symptoms of the initial and present Parkinson Disease

Sinais & Symptoms	Initial		Present		Total	
	N	%	N	%	N	%
Bradkynesia	23	76.6	26	86.6	30	100
Stiffness	19	63.3	23	76.6	30	100
Tremor at rest	24	80	30	100	30	100
Tremor in movements	19	63.3	30	100	30	100
Imbalance	23	76.6	25	83.3	30	100
Diffic. to start movements	16	53.3	19	63.3	30	100
Dific. to perform movements	24	80	26	86.6	30	100
Skin alteration	7	23.3	16	53.3	30	100
Hyperhidrosis	12	40	17	56.6	30	100
Impaired deglutition	9	30	15	50	30	100
Excess saliva	11	36.6	21	70	30	100
Lacrimation	11	36.6	16	53.3	30	100
Speech impairment	18	60	23	76.6	30	100
Vocal alteration	13	43.3	19	63.3	30	100
Understanding difficulties	7	23.3	10	33.3	30	100
Hearing difficulties	10	33.3	15	50	30	100
Festinant march	0	0	12	40	30	100
Diminished gestuality	16	53.3	26	86.6	30	100
Alteration in facial mimics	18	60	23	76.6	30	100
Diminished blinking	16	53.3	21	70	30	100
Mental confusion	1	3.3	1	3.3	30	100

Other symptoms presently reported as being part of the clinical condition of Parkinson's Disease by the interviewed individuals includes balance disturbances (83.3%), difficulties to trigger movement (63.3%), difficulties to perform movement (86.6%), skin con-

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ditions (53.3%), hyperhidrosis (56.6%), dysphagia (50.0%), excess saliva (70.0%), lacrimation (53.3%), speech disturbs (76.6%), hearing impairment (50.0%) and mental confusion (3.3%). These complaints have also been described by Silva (1984), Longo (1988), Barbosa (1989), Voiculescu (1991), Guimarães (1993), Stem (1993), Brown (1994), Breteler (1995), Jakobs et al. (1995), Tison et al. (1995), Micheli e Fernández (1996), Fazoli (1997), Gamboa et al. (1997), Lamônica et al., (1997), Gargantini (1998), Limongi (1998), Gamboa (2001), Knoop e Padovani (2001), Volonté et al. (2002).

It is important to stress that the evolution of symptoms shows peculiar characteristics according to age and other individual variables. However, out of the studied symptoms, tremor while performing motor acts was reported as having the greatest evolution, that is, it evolved in 36.7% being present in 100% of cases, followed by excess of saliva with an increase of 33.4%, reduction of gestures with an increase of 33.3%, tremor during rest, skin conditions, deglutition and vocal alteration (20%). Out of the reported symptoms with increased evolution it can be point out the phono audiological alterations, which indicates the importance of the follow-up by speech therapists and the use of standardized instrument to support this follow-up. The phono audilogic aspects related to Parkinson's Disease have been described by many authors such as Flint (1997); Brown (1994); Fazoli (1997); Gamboa et al. (1997); Lamônica et al. (1997); Lamônica (1997); Lima et al. (1997); Gargantini (1998); Limongi (1998); Gamboa (2001); Knoop and Padovani (2001); Volonté et al. (2002); Dias and Limonge (2003).

Adams and Victor (1996) reported that such symptoms have their onset during the disease and tends to progress and to interfere in the quality of live of patients with Parkinson's Disease.

In TABLE 4 it is presented the report of diseased patients regarding the occurrence of health problems such as depression (60.0%), circulatory problems (33.0%), diabetes (3.3%) and other (53.0%) such as impaired intestinal function, epilepsy and respiratory problems.

TABLE 4 – Reported health problems associated to Parkinson Disease

Health problem	N	%
Depression	18	60
Circulatory problems	10	33
Diabetes	2	6.6
Other	16	53

Lima et al. (1997) mention that language seems to play a mediator role in depressive situations even though the cause of depression is not speech disturbance and/or the disease itself. It is mostly linked to the self-image of the patient. Other authors have also reported depression among patients with Parkinson's Disease (COOPER et al., 1991; ALEGRINI et al., 1992; LAMÔNICA, 1997).

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CONCLUSIONS

The importance of having a specific and structured protocol for anamnesis makes easy the understanding of the clinical evolution and helps professional to obtain a standard history of the evolution of the disease in profit of the multidisciplinary team. The result of the present study improved the understanding of the studied phenomenon in terms of its complexity and clinical evolution and it was also useful for participants that had the opportunity to see this material for their own follow-up. However, other questionnaires can be added according to the needs of the team dealing with these cases. Studies with similar characteristics should be encouraged in other services aiming to validate protocols that benefits the understanding and the follow-up by the team, the patients and their families.

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ANNEX

PROTOCOL

IDENTIFICATION:

Name _____
 Date of birth _____ Sex _____
 Profession _____ Marital status _____
 Address _____
 Family composition _____

COMPLAINT:

EVOLUTION OF THE PROBLEM:

When and how it started?

Above 60 years () 50 - 60 years()
 40 - 50 years () Below 40 years ()

Compromised side:

Initial () right () left () both
 Presently () right () left () both

Which are the initial and present signals?

	Initial		Present
	Stiffness ()		Stiffness ()
Tremor ()	R () L ()		Tremor () R () L ()
	Bradkynesia ()		Bradkynesia ()
	Tremor at rest ()		Tremor at rest ()
	Tremor at movement ()		Tremor at movement ()

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Balance difficulties ()	Balance difficulties ()
Difficulty to start movement ()	Difficulty to start movement ()
Diffic. to perform movement ()	Diffic. to perform movement ()
Festinant march ()	Festinant march ()
Diminished gestuality ()	Diminished gestuality ()
Impaired facial mimics ()	Impaired facial mimics ()
Diminished blinking ()	Diminished blinking ()
Skin disturbs ()	Skin disturbs ()
Hyperhidrosis ()	Hyperhidrosis ()
Impaired deglutition ()	Impaired deglutition ()
Excess salivation ()	Excess salivation ()
lacrimation ()	lacrimation ()
impaired speech ()	impaired speech ()
vocal alteration ()	vocal alteration ()
understanding difficulties ()	understanding difficulties ()
impaired hearing ()	impaired hearing ()
mental confusion ()	mental confusion ()

Observation: _____

MEDICAL INFORMATION:

Other health problems:

diabetes ()	cardiac problems ()
respiratory problems ()	depression ()
blood pressure alteration ()	circulatory problem ()

Other: _____

Drugs and doses? _____

Family data:

Which modification occurred in your life after the disease?

