NON-MOTOR SYMPTOMS IN PARKINSON’S DISEASE
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Abstract: Introduction- Non-motor symptoms in Parkinson's disease are often under recognized. The patients may manifest non-motor symptoms belonging to cognitive, psychiatric, autonomic, sleep and sensory domains. The non-motor symptoms questionnaire is a 30 point questionnaire that allows patients to report non-motor symptoms. The NMS questionnaire analyses the presence or absence of 30 non-motor symptoms and awards a score of 1 out of 30 for the presence of each symptom. Aims and Objectives - To determine the prevalence of non-motor symptoms in Parkinson's disease and the time of occurrence of non-motor symptoms in relation to motor symptoms. Methods - This was an observational cross sectional study. The NMS questionnaire was used to collect data from 30 Parkinson's patients. Results - The mean total non-motor symptoms score was 5.7 ranging from 0-17 of a maximum of 30. At least one symptom was present in 93.3 percentage of the patients. Dizziness was the most common symptom followed by memory loss and anxiety. A progressive increase in the mean total score of non-motor symptoms was observed with increasing severity of the disease. 33 percentage of Parkinson's patients had onset of sensory symptoms before the occurrence of motor symptoms. The most common sensory symptoms to precede motor symptoms were unexplained pains followed by restless legs and sleeplessness. Conclusion - The non-motor symptoms are highly prevalent in Parkinson's patients and they may precede the onset of motor symptoms in one third of patients. So the non-motor symptoms should be sought for and addressed. Keyword: non-motor symptoms, Parkinson's disease

INTRODUCTION:
Parkinson's disease (PD) is the second most common neurodegenerative disease. The importance of non-motor symptoms (NMS) for people with PD has gained a greater awareness in recent years. Reports have suggested that these can have a greater influence on the patient's quality of life than the motor symptoms of the condition. The need to further understand the basis and clinical burden of NMS has led to the development of a number of measurement tools including the patient-completed NMS Questionnaire (NMSQuest). This consists of 30 questions grouped into nine domains. It has been used widely both as a research tool and as a clinical scoring scale. This leads to accurate diagnosis and a better management of the PD symptoms. The generation of tools such as NMSQuest reflects a general increase in the overall development of patient based questionnaires as it has been accepted that a combination of subjective and objective clinical measures is required to get a clear overall picture of the impact of PD on individual patients. When combined, these will provide a greater understanding of all aspects of the disease and result in a better personalized therapeutic approach.

AIMS AND OBJECTIVES:
To determine the prevalence of non-motor symptoms in Parkinson's disease and the time of occurrence of non-motor symptoms in relation to motor symptoms.

METHODS:
This was an observational cross sectional study. The non-motor symptoms questionnaire was used to collect data from 30 Parkinson's patients. Non-demented Parkinson's disease patients attending the movement disorder clinic, who satisfied the United Kingdom Parkinson Disease Brain Bank criteria for diagnosis of Parkinson's disease, were included in the study. Routine demographic and clinical data were collected at the same visit. The participants were asked to identify the NMS that they had experienced both before and after formal diagnosis of PD. The NMSQuest consists of a list of 30 common NMS. The data was expressed as the percentage of participants who express one or more non motor symptoms.
RESULTS:
Out of 30 patients, 22 patients (73.3%) were male and 8 patients (26.6%) were female. The patient’s age range was 40 to 82 years. The mean age was 59±11.9 years. The mean duration of the disease was 5.48±3.6 years. The disease duration ranged from 3 months to 13 years.

The mean total non-motor symptoms score was 5.7±4.10(SD) ranging from 0-17 out of a maximum of 30. At least one symptom was present in 93.3% of the patients. Dizziness(53.3%) was the most common symptom followed by memory loss(43.3%) and anxiety(40%). A progressive increase in the mean total score of non-motor symptoms was observed with increasing severity of the disease as assessed by the Hoehn and Yahr staging. 33% of Parkinson’s patients had onset of sensory symptoms before the occurrence of motor symptoms. The most common sensory symptoms to precede motor symptoms were unexplained pains followed by restless legs and sleeplessness.

MEAN
(N=number of patients. Total number of patients is 30)

CONCLUSION:
The non-motor symptoms are highly prevalent in Parkinson’s patients and they may precede the onset of motor symptoms in 1/3 rd of patients. So the non-motor symptoms should be sought for and addressed.

REFERENCES: