**Detecting Parkinson’s Disease using Machine Learning**

**Functional Requirement**

**Objective:**

Whereas functional requirement are common in Parkinson’s disease (PD), a parkinsonian syndrome may occasionally reflect a pure functional disorder (also named functional parkinsonism [FP]). This review aimed to decipher these entities to clarify the link between functional manifestations and PD.

**Methods:**

Following the PRISMA guidelines, the authors performed a systematic literature search of the PubMed and Science Direct databases for the period 1988 to December 2018 to identify studies of patients with either FP or PD associated with functional neurological symptoms.

**Results:**

From the 844 articles screened, 22 were retained, including 12 studies of functional neurological symptoms in PD and 16 studies of FP. The studies of functional symptoms in PD included 121 patients—57% were women, and the mean age was 61.3 years. Psychiatric history (mostly depression) and exposure to triggering stressors were frequent: 60% and 82.5%, respectively. The most common symptom was tremor (33.8%), most often located on the side most affected by PD (50%). Studies of FP included a total of 120 patients—62% were women, and the mean age was 50.7 years. The first FP symptoms appeared on average 5 years before diagnosis, with an abrupt onset in half the cases; 67.6% had a psychiatric history, and 46.8% were exposed to triggering stressors, such as physical injury, stress at work, or loss of family or friends.

**Conclusions:**

Findings suggest a possible relationship between PD and FP. Clinicians should keep in mind the possibility of functional symptoms in PD patients.