PSYCHOGENIC MOVEMENT DISORDERS

C. FALUP-PECURARIU, O. FALUP-PECURARIU, A. BĂLESCU

"Transilvania" University of Braşov

Abstract: Psychogenic movement disorders represent a common pathology and each movement disorders may occur on a psychogenic background. These types of movements represent an important challenge in the neurological practice. Epidemiological data demonstrate a large frequency (between 2,6% and 25%) of the total of the involuntary movement disorders in specialized centres. Suggestive elements for these movements are emphasised from the historical, clinical and therapeutic point of view. The aim of this study was to evaluate the clinical characteristics and the comorbidities in psychogenic movement disorders. It is a prospective study comprising 16 patients with psychogenic movement disorders (PMD). We studied the clinical characteristics, the comorbidities and the general features suggesting the psychogenic nature of these cases. Out of a total number of 16 cases, 8 (50%) were with psychogenic tremor, 4 cases (25%) with gait disorders, 3 (18,75%) with dystonia and 1 case with psychogenic myoclonus (6,25%). We analysed each type of PMD and the therapeutic options. Psychogenic movement disorders could be treated in half of the cases, through a detailed dialogue with the patient and by psychotherapy, after a correct diagnosis which excluded an organic pathology.

Keywords: Psychogenic movement disorders, diagnosis, treatment, outcome.

Rezumat: Tulburările de mișcare psihogene reprezintă o patologie comună și practic, orice tulburare de mișcare poate surveni pe fond psihogen. Aceste tipuri de mişcări reprezintă o mare provocare în practica neurologică. Datele de epidemiologie demonstrează o frecvență largă cuprinsă între 2,6% și 25% din totalul mișcărilor involuntare în centrele specializate. Sunt prezentate elementele sugestive pentru aceste mişcări din punct de vedere anamnestic, clinic și al răspunsului terapeutic. Scopul studiului de față a fost de a evalua caracteristicile clinice și comorbiditățile în tulburările de mișcare psihogene. Studiul de față este unul de tip prospectiv care a cuprins 16 cazuri de miscări involuntare psihogene (MIP). Am studiat caracteristicile clinice, comorbiditatea si elementele generale care au sugerat natura psihogenă a acestor cazuri. Din totalul de 16 cazuri, 8 (50%) au fost cu tremor psihogen, 4 cazuri (25%) cu tulburări de mers, 3 (18,75%) cu distonie și un caz cu mioclonie psihogenă (6,25%). Se analizează separat fiecare tip de tulburare de mişcare şi opțiunile terapeutice. Tulburările de mişcare psihogene pot fi tratate în aproximativ jumătate din cazuri printr-un dialog detailat cu pacientul şi psihoterapie după un diagnostic correct, care a exclus o patologie organică.

Cuvinte cheie: Tulburări de mişcare psihogene, diagnostic, tratament, evoluție.

INTRODUCTION

Psychogenic movement disorders represent a common pathology and each type of movement disorder may occur on a psychogenic background. (2, 5, 7, 10, 13, 14, 15). These types of movements represent an important challenge in the neurological practice (3). As against the pseudocrises, which may differ from the EEG-based epileptic crises, the psychogenic movement disorders may be differentiated only clinically (3). Specialized literature data include cases or series of cases of psychogenic movement disorders, such as: tremor, (8), dystonia (4, 9), myoclonus (12), parkinsonism (11). There are no data on large cohorts regarding their incidence and prevalence.

The first person who described this type of movement was Charcot (1) in the 19th century, mentioning hysteric neurological disorders in women and children and in men, in fewer cases. He also described good results, using suggestion and hypnosis in treating these movements.

Epidemiology data prove a large frequency of between 2,6% and 25% (16, 17). Fahn (4) reports the casuistic of Columbia Clinic on 131 patients, obtaining the following distribution: dystonia 53%, tremor 13%, movement disorders 9%, myoclonus 2%, parkinsonism 1,9%, tics 1,3%.

Key elements suggesting that a movement disorder may be of psychogenic nature (4):

a. Anamnesis and medical history: sudden start of disease, static evolution, spontaneous remissions (inconsistent in time), obvious psychical disorder, multiple somatisations, being employed in the sanitary system, wish for compensations, presence of secondary earnings, young woman.

b. Clinic: inconstant character of the movements (amplitude, frequency, distribution, selective disability paroxystic movement disorders, the movements increase along with attention and decrease at the same time with

distractibility, false weakness, false sensorial movements, deliberate lowering of movements, movement anomalies are strange, multiple or difficult to classify.

c. Therapeutic responses: without response to a proper medication, placebo response, remission with psychotherapy.

PURPOSE OF STUDY

To evaluate the clinical characteristics and the comorbidities within the psychogenic movement disorders.

MATERIAL AND METHOD

This is a prospective study, comprising 16 cases of involuntary psychogenic movements (IPM). We studied the clinical characteristics, the comorbidity and the general elements, which suggested the psychogenic nature of these cases.

RESULTS

Out of the total of 16 cases, 8 (50%) were with psychogenic tremor, 4 cases (25%) with movement disorders, 3 (18,75%) with dystonia and one case presented psychogenic myoclonus (6,25%).

Below, we will analyse each type of movement disorder separately.

A. Psychogenic tremor

The study comprised 8 cases (50%) of psychogenic tremor. The average age was of $45,34 \pm 16,47$ years (limits of 18-57 years old). The average age of the disease start was of $42,75 \pm 9,39$ years (17 - 52 years old). The evolution average length of the disease was of $35,46 \pm 47,23$ months (limits of 1 -145 months).

Table 1. Clinical characteristics of the psychogenic tremor

Parameter		
Average age	45,34 ± 16,47	Limits of 18-57
	years	years old
Average age	42,75 ± 9,39	Limits of 17 -52
of the disease	years	years old
start		
Evolution	$35,46 \pm 47,23$	Limits of 1 -145
average	months	months
length		
Generalized	4/8 cases	50%
disease start		
Segmentary	3/8	
disease start		
Tremor	1 case	
limited to the		
start region		
Generalised	2 cases	
tremor in		
evolution		
Bilateral start	1/8	
Accentuation	5/8 cases	
during		
examination		
Distractibility	4/8	

B. Psychogenic dystonia was identified in 3 cases (18,75%).

Table 2. Clinical characteristics of psychogenicdystonia.

No.	Gender	Age	Start	Туре	Evolution
				of	
				start	
1	Female	24	22	Acute	Undulant
			years		
			old		
2	Female	29	27	Acute	Progressive
			years		
			old		
3	Female	31	31	Sub-	Stationary
			years	acute	
			old		

continuation

No.	Localisation	Туре	Precipitant factors
1	Generalized	Dystonia repose	Car accident
2	Right lower limb	Dystonia action	-
3	Right lower limb	Dystonia repose	Car accident

C. Psychogenic movement disorders were encountered in 4 cases (25%).

Gender	Age	Start	Evolution	Evolution
			length	
Fem	31	Acute	3 years	Accentuation
Fem	64	Acute	5 years	Undulant
Fem	44	Lent	2 years	Accentuation
		progressi		
		ve		
Male	56	Acute	6 months	Undulant

continuation

Туре	Precipitants	Distractible
Slow	Without	Yes
movement		
Hesitating	Maleolar fracture	Yes
movement		
Hesitating	Ankle sprain	Yes
movement		
Hesitating	Without	Yes
movement		

Psychogenic myoclonus – below, we are presenting a case with this pathology.

• patient of 38 years old without significant pathologic personnel antecedents

• one day previously to this episode, she suffers a major physical stress at the workplace (possibility of being fired due to reduced efficacy).

• Episode of acute disease manifested by excessive suddenly installed fatigue (which started 12 hours before consultation), followed by short term and sudden muscular contractions at the level of the entire body.

• The medical consultation proved non-rhythmic muscular contractions, of large amplitude, more evident during consultation and which decreased when making voluntary activities (decreasing number from 7 to 7, starting with 100 or making successive voluntary movements).

- Normal laboratory analyses.
- She refused being filmed.

• Cvasi-completed improvement after placebo therapy with physiological serum perfusion, after having informed the patient that the effect will install immediately and it will be of long term.

• Home treatment with Tranxene 5mg for 14 days with the suggestion that this medicine will prevent the recurrence of the involuntary movements.

• Regarding the repeated check ups made at 7, 14, 21 and 60 days, the patient did not present myoclonus anymore, neither other types of involuntary movements.

The suggestive clinical elements of psychogenic movement disorder regarding the studied batch, revealed the following aspects: distractibility - 12 cases (75%), sudden start of disease - 10 cases (62,5%), spontaneous remission - 2 cases (12,5%). In 5 cases, the patients were treated from the point of view of the organic pathology, no therapeutic response with medication properly administered has been registered. In 3 cases, an important remission of the symptomathology has been recorded, regarding the placebo therapy, in 2 cases - litigious potential situations with potential benefices requested by the patients. Out of the total number of patients, 10 were hospitalized and informed about their pathology nature and underwent the placebo treatment, as well as psychotherapy. The total remission of symptomathology was gained in 3 cases and it was partial in 5, and regarding 2 patients no benefice was obtained.

DISCUSSIONS

Kim and the collaborators (6) present the largest series of psychogenic tremor, ever mentioned in the specialized literature. On a batch of 70 patients, who met the diagnosis criteria of the psychogenic tremor, he proved the sudden start of the disease in 73% of the cases, with maximum disability at start level in 46% of the cases and then with static evolution (46%) or fluctuant (17%). Out of those 70 cases, 53 had a focal or segmentary start, 5 had a bilateral start. Regarding the suggestive elements of the involuntary psychogenic movements, the following aspects were identified: distractibility in 80% of the cases. One of the new elements mentioned by this series is the insidious start encountered in 13% of the cases.

Generally, the electrophysiological studies are important in the differential diagnosis of the tremor (18).

Regarding our casuistic, we have not performed this examination on any of our patients.

Psychogenic dystonias present a rare pathology. We encountered such cases in our casuistic, especially in the lower limbs. Lang (9) studied 18 cases of psychogenic dystonia and found a precipitant factor in 14 of those 18 cases. In the majority of the cases, the disease start was sudden. As against the idiopathic torsion dystonia, the involvement of the lower limbs was significant, being identified in 12 cases. 10 patients described the paroxystic worsening of their situation. Psychogenic movement disorders also represent an important challenge (16, 17). Lempert (quoted 10 times) publishes the following helping elements in order to diagnose this pathology: hesitation (16,2%), excessive lowering of the movement (32%), fluctuations in movement disability with noneconomic postures and the excessive use of the muscular energy (51%), the "movement pattern "to walk like on ice" (30%) and the psychogenic Romberg test (32%). If one or more of the above-mentioned elements are present, the diagnosis is 90% accurate.

CONCLUSIONS

1. Psychogenic movement disorders could be treated in half of the cases through a detailed dialogue with the patients and by psychotherapy, after the exclusion of the organic pathology.

2. Placebo treatment of these patients also raises ethical problems.

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