



## Organic syndromes diagnosed as conversion disorder: identification and frequency in a study of 85 patients

Franny C. Moene<sup>a,\*</sup>, Erik H. Landberg<sup>b</sup>, Kees A.L. Hoogduin<sup>c</sup>, Philip Spinhoven<sup>b</sup>, Leopold I. Hertzberger<sup>d</sup>, Ruud P. Kleyweg<sup>d</sup>, Jacques Weeda<sup>a</sup>

<sup>a</sup>Psychiatric Hospital, De Grote Rivieren, Overkampweg 115, 3318 AR Dordrecht, The Netherlands

<sup>b</sup>Department of Clinical Psychology, Leiden University, Leiden, The Netherlands

<sup>c</sup>Department of Psychopathology, University of Nijmegen, The Netherlands

<sup>d</sup>General Hospital "Albert Schweitzer," Dordrecht, The Netherlands

Received 23 April 1999; accepted 21 July 1999

#### Abstract

**Background:** The percentage of patients initially diagnosed with a conversion disorder and later identified as having an organic disorder has been decreasing in recent studies. **Method:** Consecutive patients with a diagnosis of conversion disorder were referred for psychiatric diagnosis and treatment. Research questions were: (1) What incidence of neurological disorder is revealed by neurological reassessment and by which diagnostic technique is the final diagnosis established?, (2) What differences can be observed between true-positive and the false-positive results? **Results:** Ten (11.8%) of the 85 patients examined appeared to suffer from a neurological disorder. In this sample, variables discriminating between the true positives and false positives were: (1) prior suspicion of neurological disorder; (2) older age at referral; (3) older age at onset of symptoms; (4) longer duration of

symptoms; and (5) use of medication. Three variables contributed significantly to the prediction of organic disorder: prior suspicion of neurological disorder; age at onset of symptoms; and duration of symptoms. **Conclusions:** Although our results are in line with those of other recent studies, the percentage of false positives was still high. The data further emphasize the dangers of making a diagnosis of conversion disorder in the absence of positive evidence. It is important to continue to provide follow up for patients with a diagnosis of conversion disorder. Unfortunately, unreliable psychiatric indications, like certain behavioral characteristics, are still used in the diagnostic process. The results show that a general neurological examination is still a valuable diagnostic instrument in addition to modern diagnostic techniques. © 2000 Elsevier Science Inc. All rights reserved.

Keywords: Psychogenic motor symptoms; Conversion disorder; Neurological reassessment; False positives; True positives; Identification

#### Introduction

The percentage of patients initially diagnosed with a conversion disorder [1] and later identified as having an organic disorder, in most cases a neurological disorder (i.e., a so-called false positive), has changed from the early days of Slater and Glithero [18], who considered the incidence to be high, to rather lower levels in more recent studies. Table 1 provides an overview of the most relevant studies.

Comparison of these studies is difficult for a number of reasons. First, some studies that find a high percentage of

organic disorder, are quite dated. Since these works, major developments have occurred in the technical diagnosis of patients and advanced diagnostic techniques have become available [2–6]. The studies are also difficult to compare due to differences in descriptions of the symptoms and delineation of the relevant symptom patterns (both pseudoneurological symptoms and pain symptoms or vomiting are mentioned). The fact that the diagnostic categories are often not mutually exclusive further complicates comparison [7, 8]. In such a manner, Weintraub [9] cited a high false-positive rate of 63.5% in a study by Whitlock [10], but his patient group consisted of patients with coexisting neurological or organic disease.

Considerable differences between these studies also exist in the duration of the symptoms, the frequency of repeated

<sup>\*</sup> Corresponding author. Tel.: 31-78-6522850; fax: 31-78-6522829. *E-mail address*: moene@knoware.nl (F.C. Moene).

Table 1 Percentage of patients initially diagnosed with a conversion disorder and later with an organic syndrome (false positives)

Investigators	N	False positives (%)	Follow-up (years)
Tissenbaum et al. [14]	395	13.4 <sup>b</sup>	1-8
Gatfield and Guze [20]	24	17	5-12
Slater and Glithero [18]	85	50	10 - 14
Raskin et al. [21]	50	29	1
Whitlock [10] <sup>a</sup>	56	63.5	_
McKegney [8] <sup>a</sup>	144	47	_
Merskey and Buhrich [7] <sup>a</sup>	89	67	_
Stefansson et al. [22]	64	12.5	7 - 16
Watson and Buranen [23]	36	28	10
Fahn and Williams [24]	396	40.1	_
Spierings et al. [2] <sup>c</sup>	84	6	1 - 11
Mace and Trimble [5]	73	15	10
Crimlisk et al. [6]	64	4.7	7 - 9
Couprie et al. [4]	56	4	1.5 - 9.5

<sup>&</sup>lt;sup>a</sup> Conversion disorder and co-existing neurological or organic disease (not specified).

physical examination, the thoroughness and care with which the diagnosis was performed, the research setting, and the time of follow-up. It appears that, with increased follow-up time, there is an increased probability of encountering neurological disease that can, in retrospect, explain the initial symptoms.

Finally, in a number of studies, diagnoses were determined by exclusion of an organic disease without further positive confirmation on the basis of psychiatric examination. In contrast, there are indications that patients with a previous psychiatric history are at a greater risk of having their neurological symptoms attributed to a psychiatric syndrome [5].

The aim of the present study was to explore the following questions:

- 1. What incidence of neurological disorder is revealed by neurological reassessment, and by which diagnostic technique is the final diagnosis established?
- 2. What differences can be observed between the organic or false-positive group and the conversion or true-positive group on the basis of the available information?

#### Method

Neurological reassessments and psychiatric examinations were undertaken on consecutive patients with a prior diagnosis of conversion disorder upon their referral to a Dutch psychiatric hospital (De Grote Rivieren) for examination and treatment during 1991 to 1996 [11–13].

Inclusion criteria for the study were:

- A diagnosis of motor-type conversion disorder (i.e., paresis or paralysis, gait disturbances, coordination problems, abasia—astasia, aphonia, fits, or pseudoepileptic seizures with motor activity).
- No dual neurological diagnosis, no major affective disorder, or other severe psychiatric diagnosis requiring immediate treatment;
- Duration of symptoms of at least 1 month.
- Both genders between 18 and 65 years of age.
- No problems with speaking the Dutch language.

Neurological testing of all patients was carried out by two neurologists at a nearby general affiliated hospital. Each patient was seen by both neurologists. Further diagnostic techniques were carried out on the basis of the results of the neurological examination, and of recent previous assessments. When appropriate, the neurologists referred the patient to another somatic specialist or to a specialist clinic for further diagnostic procedures.

The psychiatric screening using the DSM-III-R [24] criteria took place on the same day as the neurological screening by a psychiatrist from our psychiatric hospital. The study was approved by the medical ethics committee of the hospital and patients provided informed consent.

#### Results

Subject characteristics

Our sample consisted of 85 patients (21.2% men and 78.8% women). Upon referral, their mean age was 38 years (sp = 12.7, range 17 to 65) with a mean onset at the age of 33.5 years (sp = 12.6; range 15 to 67). The duration of the symptoms was an average of 4.3 years (sp = 6.0, median 3.8 years, range 2 months to 34 years). In 27 (32.1%) patients, the onset of the symptoms had been acute (within 1 week). Forty (47.6%) patients had reported the same or other conversion symptoms in the past. Fifty-seven (67.1%) patients had received previous psychiatric treatment. Medication (psychotropic or non-psychotropic) was being taken by 54 (65%) patients at the time of referral.

All patients had already been seen by an average of three somatic specialists, including a neurologist. Previous assessments took place in general hospitals, research hospitals, or, in the case of patients with pseudoepileptic seizures, specialist epilepsy centers. For 26 (30.6%) patients, organicity was previously suspected, but despite often extended supplemental examination (including EEG, CT scan, MRI, and CSF), an adequate somatic cause for symptoms could not be found.

Forty-four patients had motor symptoms (either absence of motor function; e.g., hemiplegia or paraplegia) or pre-

<sup>&</sup>lt;sup>b</sup> After follow-up, 53 of the 395 psychiatric (13.4%) were found to have organic disease; 17 of the 53 (32%) were originally diagnosed as conversion disorder.

<sup>&</sup>lt;sup>c</sup> A study with children and youngsters (range 6–17 years).

# دريافت فورى ب متن كامل مقاله

### ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان ۲ صفحه اول هر مقاله
  - ✔ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
    - ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات