

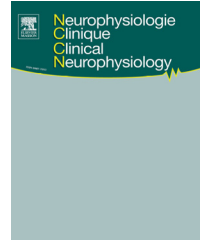


Disponible en ligne sur

ScienceDirect
www.sciencedirect.com

Elsevier Masson France

EM|consulte
www.em-consulte.com/en



ORIGINAL ARTICLE/ARTICLE ORIGINAL

Neurophysiology of conversion disorders: A historical perspective



Neurophysiologie des troubles de conversion : perspective historique

M. Crommelinck

Institute of Neurosciences (IoNS), Catholic University of Louvain, 1200 Brussels, Belgium

Received 4 October 2013; accepted 10 October 2013

Available online 31 October 2013

KEYWORDS

Conversion disorders;
Hysteria;
Historical
perspective;
Neuroimaging
techniques;
Cognitive
neuropsychiatry

MOTS CLÉS

Conversion ;
Hystérie ;
Histoire de la
médecine ;
Neuroimagerie ;

Summary The aim of this paper is to present a short historical perspective on the neurophysiological approach to hysteria and conversion disorders. The body of this paper will be constituted of three main parts. In the first part, we will present the significant progress due to some pioneers of neurology/psychiatry during the XIXth century. As we shall see, this period was particularly rich in personalities whose work gradually laid the foundations to a true medical approach to hysteria. In the first half of the XXth century, different factors have led to a long eclipse of the neurological approach to hysteria. In the second part, we will show how, by the 1960's–1970's, the conceptual and methodological advances in neurophysiology, as well as the turning point of cognitive sciences (and cognitive psychology in particular) allowed a gradual reinstatement of hysteria within the fields of neurology and clinical neurophysiology. Finally, and this is the third part of this paper, we will show how over the past three decades, an entirely new neurophysiological approach to hysteria and conversion disorders has emerged.

© 2013 Elsevier Masson SAS. All rights reserved.

Résumé Dans cet article, nous retraçons brièvement l'historique de l'approche neurophysiologique de l'hystérie ou des troubles conversifs. Il s'articule en trois parties. Dans une première partie, nous décrivons les progrès significatifs dus aux pionniers neurologues et psychiatres du 19^e siècle. Nous verrons à quel point plusieurs personnalités ayant jeté les bases d'une approche véritablement médicale de l'hystérie ont contribué au développement scientifique de cette époque. Par contre, la première moitié du 20^e siècle a connu une longue éclipse dans l'approche neurologique de l'hystérie. Dans la deuxième partie de l'article, nous montrerons comment, durant les années 1960 et 1970, les avancées conceptuelles en neurophysiologie et, surtout, l'avènement des neurosciences cognitives (et, plus particulièrement, de la

E-mail address: Marc.Crommelinck@uclouvain.be

0987-7053/\$ - see front matter © 2013 Elsevier Masson SAS. All rights reserved.

<http://dx.doi.org/10.1016/j.neucli.2013.10.126>

neuropsychologie cognitive) ont permis de recadrer l'hystérie dans le champ de la neurologie et de la neurophysiologie clinique. Enfin, nous montrerons dans la troisième partie de cet article comment les 30 dernières années virent se développer une approche totalement nouvelle de l'hystérie et des troubles conversifs.

© 2013 Elsevier Masson SAS. Tous droits réservés.

Introduction

This paper aims to present a brief historical overview of the neurophysiology of hysteria or conversion disorders. Three main parts will constitute the body of this article.

In the first part, we will present the significant progress due to some pioneers of neurology/psychiatry. As we shall see, the nineteenth century was particularly rich in personalities whose work gradually laid the foundations for a true medical approach to hysteria. In this era it was a question of causing some kind of epistemological break: i.e removing the disease from a tradition of thought, still alive at that time although dating back to Greek Antiquity, which described it as an affection of the uterus (etymologically "hysteria" comes from the Greek *ustera*, meaning matrix, uterus). Thus, to mention only one of the oldest sources, Plato [21] in *Timaeus* (91-c) evoked that "whenever the matrix or womb, as it is called, which is an indwelling creature desirous of child-bearing, remains without fruit long beyond the due season, it is vexed and takes it ill; and by straying all ways through the body and blocking up the passages of the breath and preventing respiration it casts the body into the uttermost distress, and causes, moreover, all kinds of maladies; until the desire and love of the two sexes unite them". This design (also taken again by Hippocrates) of a "wandering" uterus, worried and frustrated, the source of all evils, placed for a long time hysteria in the heart of female sexuality, troubled and confused... the treatment often confining itself to "marriage"! We also know that in the Middle Ages and until much later in the Classical Age, hysterics were often considered as witches possessed by the spirit of the devil and ended at the stake (see the famous case of the possessed of Loudun). The nineteenth century appears quite clearly as a turning point. It was necessary in this era to relocate the disease in the context of a more scientific, even experimental medicine recently theorized by Claude Bernard and to rely as much as possible on the anatomopathological method that had quickly demonstrated its relevance. At that time clinicians had the aim of providing a finer clinical picture of this protean disease, posing for the first time questions regarding its physiological and psychopathological basis and developing, still in a strong empirical manner, the first attempts at therapeutic measures. From those early days, we will consider, among many others, the names of Pierre Briquet, John Russell Reynolds, Jean-Martin Charcot and finally Sigmund Freud.

During the first half of the twentieth century, two main sets of factors led to a long eclipse of the neurological approach to hysteria. Firstly, these were the excesses of dramatization and the suspicions of simulation in hysterical "patients" as well as the instrumentalization of the

body by the chief physician, all elements that marred the end of the career of J.M. Charcot at the Salpêtrière. Thus, J. Babinski (1857–1932), student and Charcot's senior clinical assistant eventually excluded from the field of neurology psychic hysteria such as it had been identified by Charcot. The second factor is undoubtedly the birth, at the turn of the century, of Freudian psychoanalysis: this would come to focus on models and practices in psychodynamic terms, the hysterical neurosis becoming not only the psychoanalytic paradigm of the etiology of all forms of neurosis (repression as a defense mechanism following a psychic trauma and hysteria as a manifestation of the return of the repressed in the form of physical symptoms: hysterical conversion) but also the occasion of the setting-up of the "listening technique" ("talking cure") and "free associations", after unsuccessful tests of hypnosis. Apart from a few sporadic references, study of conversion disorders thereby left neurological research and practice, to inhabit thereafter the field of psychiatry and psychopathology. Let us note only in passing an interesting contribution of I. Pavlov [20,27] (1849–1936) around the Thirties, which, within the framework of its associationist theories and of its "excitation-inhibition interaction" models of the cerebral cortex, makes the assumption that "a strong excitation of the instincts or the automatisms in subcortical centers may inhibit the activity of the cortex". This explains some pathological effects in hysteria in particular.

In the second part of the article, we will show how, in the 1960's–1970's, the conceptual and methodological advances in neurophysiology, as well as the turning point of cognitive sciences (and cognitive psychology in particular) allowed a gradual reinstatement of the study of hysteria within the fields of neurology and clinical neurophysiology.

Finally, and this is the third part of this paper, we will show how over the past three decades, an entirely new neurophysiological approach of hysteria or conversion disorders has developed. This is mainly due to two factors. The most important factor is probably the development of various functional human non-invasive brain imaging techniques allowing high-resolution assessment of the functional states of brain systems. The second factor is doubtless the publication by the American Society of Psychiatry of the Diagnostic and Statistical Manual of Mental Disorders (DSM). In DSM-III (1980), the clinical entity "hysteria" was dismantled into several diagnostic categories, more clearly identifying various syndromes and their articulation using statistical and quantitative axes (such as somatomorphic disorders and dissociative symptoms...). This made it possible for researchers to work on relatively homogeneous cohorts of patients.

Download English Version:

<https://daneshyari.com/en/article/3082233>

Download Persian Version:

<https://daneshyari.com/article/3082233>

[Daneshyari.com](https://daneshyari.com)