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Review

Psychoanalytical concepts of epilepsy

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ABSTRACT

As part of the anniversary issue of *Epilepsy & Behavior* looking back as aspects of the history of epilepsy, this article reviews psychoanalytical concepts of the pathogenesis of seizures and the so-called epileptic personality (epileptic constitution). It addresses the question whether these theories are completely invalid or do they have insights that are worth rediscovering.

Special Issue: Epilepsy & Behavior's 20th Anniversary

1. Introduction

The landscape of epilepsy is littered with the abandoned hulks of theories of pathogenesis, ridiculed or fallen from fashion, and perhaps none are as interesting as those of psychoanalysis. In this article for the anniversary edition of *Epilepsy & Behavior*, I was asked to look back at the history of epilepsy and write about a topic currently out of vogue, to be provocative and to engender debate, and so decided to describe some of the psychoanalytical contributions to the study of epilepsy, which were widely accepted in their time, and which today have fallen into dereliction. Were these theories completely invalid, culs-de-sac of epilepsy history, or are they exegeses worth rediscovering? Most obviously are deservedly forgotten, but in discarding these ideas, is it possible that we have indeed lost some insights which did carry some force.?

2. The milieu in which psychoanalytical concepts were introduced into epilepsy

As always, it is important to consider the context of a historical theory. When the neurologist, Sigmund Freud founded psychoanalytical theory, it proved immediately controversial and its scientific validity was challenged from the beginning. Nevertheless, psychoanalysis had a profound influence on the practice of psychiatry in particular and on society in general. It is perhaps no exaggeration to claim that Freud's theories were second only to Darwin's and Marx's on their long-term impact on twentieth century cultural history.

In the early twentieth century, "idiopathic" (syn: genuine) epilepsy was considered to be a specific disease (a disease in its own right; a disease unto itself). This was in contrast to seizures due to underlying brain pathologies such as tumors or infection, which were usually conceptualized merely as "symptoms" of the underlying condition (these were then, as now, known as symptomatic seizures). Most theory regarding epilepsy focused on the idiopathic condition, and this was also true of psychoanalysis. In idiopathic epilepsy, the production of a seizure was usually thought to require both "predisposing" and "exciting" factors. It was universally accepted that the most important predisposing factor was heredity, and most authorities also agreed that what was inherited was the "neuropathic trait", which resulted in progressive degeneration. The "exciting" factors were thought to be of various types and included psychological mechanisms.

There was also a general acceptance that idiopathic epilepsy was both a physical and psychological condition. W Aldren Turner was the leading authority of his time, and he wrote in 1907: "In earlier days the convulsion, or fit, was regarded as the sole element of importance in the clinical study of epilepsy; but in more recent years the psychical factor has come to be looked upon as of almost equal importance, and both are regarded as manifestations of a predisposition associated with inheritance" [1]. He goes on to explain that epilepsy was one manifestation of the inherited neuropathic trait and a disease in which there was inevitable neuropathic degeneration. This was a view of epilepsy shared by almost all authorities of the time (see also, for instance, Spratling [2]).

Electroencephalography (EEG) had not then been introduced as a way of visualizing a seizure and of exploring pathogenesis (the first time a seizure was recorded on EEG was in 1932 by Hans Berger [3]), and pathology rendered little of note in essential epilepsy. What pathological changes were seen were often considered consequential not causal. The study of epilepsy was thus dependent almost exclusively on clinical (including psychological) observation.

Idiopathic epilepsy was accepted by all to be an organic disorder, but the way in which seizures were generated was not known, and psychological mechanisms were often proposed in relation to this. It was then

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(and still is) quite logical to accept both that the condition was organic in nature and also that psychological mechanisms could be involved in the production of symptoms. There is no contradiction in this, and one does not exclude the other.

It was into this framework that psychoanalytical theories were introduced and used to explain two aspects of epilepsy: first, the pathogenesis of seizures; second, the "epileptic personality".

3. Psychoanalytical theories concerning the pathogenesis of seizures

Of the leading psychoanalysts of the early twentieth century, it was Sándor Ferenczi who wrote most about epilepsy. He had been a registrar in Szent Rókas kórház (the "Budapest Salpêtrière") where he said he had observed hundreds of epileptic fits, and it was their symbolism that interested him. In 1916, he wrote that epileptic seizures might be "considered as regressions to the infantile period of *wish-fulfilment by means of uncoordinated movements*…. Epileptics would then be persons in whom the disagreeable affects get heaped up and are periodically abreacted in paroxysms" [4]. As his work evolved, he increasingly saw the epileptic fit as "a regression to infantile omnipotence" and a "regression to an intrauterine situation". He conceptualized the epileptic seizure as being similar to deep sleep, which many psychoanalysts regarded as a state of regression to the antenatal state. When the fit is at its height, we may assume a state of narcissistic regression far exceeding that of ordinary sleep and resembling cataleptic rigidity and the wax-like flexibility of catatonia. On the other hand, in the motor discharge and in postepileptic delirium, the patient rages at the outer world or turns his aggression inwards against himself; he thus clings fast to his "object-relationship" [5]. He held that epileptic fits occurred when the "[epileptic's] instinctual drives break loose and rage, sometimes with bestial ruthlessness, not only against his whole environment but also against his own person, which has become alien and hostile to him. This discharge of affect then brings about often only for a few very brief moments, a sleep-like stage if rest, the pattern of which is that of the unborn child in the womb, or alternatively death" [5]. He also noted "importance of the place occupied by sexuality among the instincts to which an epileptic fit gives rein". Reich, too (perhaps not surprisingly) thought seizures could be due to a "repressed psychogenital libido" [6], and Glover reiterates these theories in his standard text the *Handbook of Psycho-analysis* (of 1949) [7], and so these theories seem to have been accepted into the psychoanalytical mainstream.

Freud himself did not write extensively about epilepsy but did consider the symptoms of an epileptic fit to express the frenzy of a tendency to self-destruction that is almost free from the inhibitions of the wish to live. Max Eitingon, who was analyzed himself by Freud, was particularly interested in exploring the links of neurology and psychoanalysis (his dissertation was on "The effects of epileptic seizures on mental association"), and he and his follower, Daniel Dreifuss, considered that cerebral trauma could weaken the ego and render it "permeable" to the release of affective and other forces resulting in such phenomena as a seizure [8].

The neurologist who championed psychoanalytical theory most strongly was L Pierce Clark, physician to the Craig Colony and Letchworth village. He had written landmark papers on status epilepticus and was a leading American authority in epilepsy. In his early writings, there is little evidence of interest in psychology, but in the 1910s and 1920s he wrote profusely on the topic [9–19]. "For many years we have known that many if not most essential epileptics possess a peculiar makeup" and that "it was 'fairly obvious' that the epileptic seizure was a regression, a flight from displeasurable difficulties in life, and a protective mechanism that withdraws or reduces the attachment and adjustment to reality" [16]. He considered that the analysis of the mental content of the fit had similarities to dream analysis as a way of understanding the patients' conflicts. "It dispels an intolerable demand and the epileptic retreats to a state of harmony and peace [the fit] is a 'striving for expression of the libidinous energies of the unconscious and a libidinous outlet of the primal sexual energies and should be considered essentially as a pathological functioning of the unconscious … It is a state due to mental infantilism caused by or co-incident with a libidinous fixation on the earlier stages of psychosexual development'. In the unconscious state, the patient gains the infantile 'level of easily recognised sexual striving'". Clark considered the motor phenomenon to be reminiscent of fetal movements and postures: "We do not know just how the impulsive movements are incited further than to surmise that, being of the first, simplest and ontogenetic type of activities of the developing organism, their incitor is from motor centres of the lower order. In these latter structures are stored up a certain quantity of potential energy which is transformed into actual energy by the blood and lymph stream. With the increasing tissue growth and tension engendered thereby this energy finds its outlet in the random movements of the foetus and the infant, and their exaggerated distorted presence is seen in the major convulsion of epileptics" [17]. Clark himself practiced psychoanalytically oriented treatment and proposed a systematic psychoanalytical approach to controlling seizures, and his papers are full of interesting case histories. Another American neurologist who later in his career began to practice psychoanalysis was Smith Ely Jelliffe whose *Disease of the Nervous System: a textbook of neurology and psychiatry* [20] was the standard textbook of neurology of the period and within which he categorized epilepsy as a "disorder of 'psychic or symbolic systems'". In a supportive discussion of Clark's theories, he pointed out that although cerebral lesions and hormonal changes could produce an epileptic fit, it was important to realize "if one should rise above the level of physic-chemical explanations that the epileptic phenomena resulted from failures of the symbolic functions of the human being. Dr Clark had emphasized this attitude and had contributed largely to its proof" [12].

4. Psychoanalytical theories of the "epileptic personality"

There was a universal belief in psychiatric and neurological circles, in the early twentieth century, that patients with idiopathic epilepsy had specific personality defects. This is not the place to explain the evolution of these ideas or reasoning, but suffice to say, they were intensely stigmatizing. With the rise of psychoanalytical theory, these ideas were elaborated upon further.

The psychoanalytical theories of the "epileptic constitution" focused on two linked points. First, was mental deterioration, which was thought to affect almost all people with idiopathic epilepsy and which was a sign of the inherited degenerative propensity (the neuropathic trait); and second, was the abnormal personality structure, which was believed to be present in most of those with idiopathic epilepsy with an origin in disturbed early childhood development.

Ernest Jones, Freud's close colleague and biographer, writing in 1910, summarized orthodox psychoanalytical views of the mental deterioration in chronic epilepsy as follows: "Perhaps the most important, practically, is the gradual reduction of intellectual capacity, which may progress to feeble-mindedness or even to profound dementia. Early evidences of this are the tardiness of general psychical reactions, a certain heaviness in thinking, a difficulty in seizing new ideas, a slowness in following the thoughts of others and a resulting conservative adherence to established and rigid opinions …. This narrowing differs from that of most dementing processes, particularly from that of dementia praecox, in being a concentric one, the patient becoming more and more confined to the interests and knowledge of his immediate environment". Jones described defects in memory and in rapport, which he considered common in epilepsy and noted that the patients are very egocentric, and with thoughts and interests centered on their own personality resulting in high levels of personal vanity. He then moved to: "….the sexual activities of epileptics. It is notorious that these are often of a turbulent or even violent nature, and, further, that perverse acts of different kinds are especially common. The sexual desires of epileptics overflow the normal channels of outlet and are manifested not only in the normal

manner but in all kinds of perverse activities. There is no kind of perversion that may not commonly be met with in epilepsy. In this latter respect the sexual activities resemble those of normal young children" [21]. To Clark and Jelliffe and many others at the time, although the personality traits were evident before the development of epilepsy, it was at the onset of seizures that the personality deteriorated. However, Clark pointed out that although "everyone admits that in the vast majority of epileptics deterioration occurs almost at its seizure inception… there exists long before the dementia an enduring character failure or alteration of the ethical, emotional and perhaps intellectual status", and that the dementia was not due to the seizures per se but the "neural and other vital processes which underlie the fit phenomena" (and in support of his contention, Clark cites such investigors as Vogt, Sommer, Beonhoffer, Kraepeline, Kirchoff, Oppenheim, Nothnagel, Turner, Voisin, Echeverria, Pilcz among others) [18].

In relation to personality defects originating in early development in epilepsy, Jones cites Freud's description of the infants' sexual life as "polymorh pervers" (i.e., the ability to gain sexual gratification outside socially normative sexual behaviors) and Maeder's work in which the sexual life of patients with epilepsy was characterized as "polyvalent" and autoerotic [22]. Jones also noted that algolagnia (the desire for sexual gratification through pain) "is one of the best known aberrant sexual tendencies of epileptics" and was responsible for cruelty and violence. Such opinions and attitudes were shared worldwide, and an interesting example is the study of 89 patients with epilepsy from an asylum in the Punjab published by Owen Berkeley-Hill, a doyen of Indian psychiatry [23].

Ferenczi, too, viewed the patient with epilepsy: "as a special human type, characterized by the piling up of unpleasure and by the infantile manner of its periodic motor discharge… They take refuge in a completely self-contained and self-sufficient way of life as it was lived in the womb, that is to say, before the painful cleavage between the self and the outer world took place" [4].

Clark maintained that a disturbed evolution of the libido was the basis of the emotional defects seen in epilepsy. The patient with epilepsy had, in his view, an "essentially polyvalent infantilism of the epileptic libido" and that the memory defects seen in epilepsy may be "due directly to the narrow range of the associations of ideas which is born of a too attenuated and infantile emotional life" [10]. He made the important distinction, often not made at the time, that epilepsy can be a disorder of affect, independent from any disorder of intellect. He viewed the person with essential epilepsy as having a personality structure (an epileptic constitution), which was invariably present, and the nucleus of which was extreme hypersensitiveness and egotism. He also considered that the seizure phenomenon was "the direct outcome of the inability of such persons to subordinate their individualistic tendencies to those of the so-called social demands and constitute a reaction away from the difficulties". He wrote that the personality of people with epilepsy is full of infantile traits, characterized by sensitivity, lability of mood, lethargy, maladjustment, being prone to rage and lack of good-fellowship, aloof, and being emotionally and sexually under-developed. In his view, the epilepsy could be considered "in the nature of a life-reaction, comparable to a state of rage or anger seen in bad-tempered individuals or excessive emotionalism in the supersensitive" [17]. He considered it impossible to distinguish whether these traits are inherited or due to somatic structural anomalies that prevent proper emotional development [13,17].

To Clark, the common concepts of epilepsy focused too much on the seizures and not on the person. "Gradually we are widening our concept of the disease as a whole: Formerly we spoke of epilepsy and the epileptic; now the phrase is slowly being reversed at the endless behest of clinicians, who demand that the epileptic and not the disease must be the main concern of our therapeutics… The point of intensive study is beginning to shift from the disease process of fits as such, which are the immediate and obvious symptoms of the disorder, to that of the total life reactions of these peculiarly afflicted individuals" [18]. Clark saw that the "chemical, physiologic, and pathologic defects are only a small part of the whole organism… and are secondary in point of importance to the fundamental defect of the epileptic character and the model reaction of this makeup. From our viewpoint it is as absurd to look for an exact anatomic seat for the causative cortical lesion or lesions in essential epilepsy as it is for that of consciousness, or mind itself…. The epileptic makeup is a defect in the integrative activity of the organism" [18]. He proposed that "essential epilepsy was intimately bound up with the epileptic individual as a whole and is an essential morbid vital response of such a defective individual at the behest of environmental stresses which he cannot meet without periodic seizures and loss of consciousness resulting in a flight or abreaction from reality. The seizures are but brusque condensed episodes of such excess stress at different levels of adjustment" [18].

Forensic psychiatrists also weighed in with a particular venom, during this psychoanalytical era, re-heating the old chestnut of the link between epilepsy and crime, and this led to some extraordinarily damaging papers about the "epileptic personality"; a notable example of the prejudicial hyperbole is that of Harding, from the psychological laboratory of the Elmira Reformatory, which paradoxically had the reputation for advanced and enlightened approaches to criminal rehabilitation [24].

This toxic mix of degeneration, defective personality, and criminal propensity was of course gross hyperbole, inaccurate, enormously stigmatizing, and it was this with its assumed inherited nature that put those with idiopathic epilepsy right in the firing line when eugenic solutions gained ascendency.

5. The reaction against psychoanalytical theory

From the beginning, Freud's theories met with hostility from many doctors. One exasperated correspondent, responding to a review of the translation of Freud's book *The Psychopathology of Everyday Life* (1901) in the BMJ proclaimed: "Surely the time has at last come when all psychologists, psychiatrists, and medical societies [should cease] to regard this modern and alien jargon about the 'unconscious' as matter for serious consideration, and follow the better course of killing the abounding nonsense of the Freudian 'Philosophy' by ridicule, or letting it perish, at least in this country, from neglect of cultivation. At present it plays the part of a virulent pathogenic microbe in the wells whence psychiatrists drink" [25].

Several neurologists did dabble in psychoanalysis, but after a while, the neurological establishment became hostile to these theories. In fact, the domination of psychiatry by psychoanalytical theory was perhaps the major cause of the regrettable chasm that developed between neurology and psychiatry in the early twentieth century, perhaps only now being healed. One of the leading neurologists of the 1930s, SAK Wilson, was himself deeply interested in psychiatry and strove to unite neurology and psychiatry but had no truck with psychoanalysis. In his definitive chapter on the epilepsies in the *Handbuch der Neurologie* in 1935, he attacks psychoanalytical concepts as being unlikely and without any proof [26], and in the standard textbook of the period (Wilson's three volume masterpiece — *Neurology*) [27], there is no mention of psychoanalytical theories of epilepsy. He also dismissed the theories of the epileptic temperament. "…. Life is difficult for these patients, and much that is attributed to temperament can with greater reason be assigned to chronic invalidism and unlucky circumstance". L Pierce Clark himself was also the subject of ferocious criticism from psychiatrists and neurologists for banality and lack of evidence, notably during a meeting of the New York Neurologic Society in October 1924 [19] and also for the allegation of plagiarism in relation to his book on the personality of Napoleon [28].

There was rightly a reaction in the 1960s against the stigmatization caused by theories of the "epileptic personality", which are among the most prejudicial and unpleasant writings on epilepsy of any period. However, it should be recognized that the concept of the abnormal

personality in epilepsy was not a psychoanalytical creation, and the psychoanalysts were firmly in an existing tradition of earlier writers. Psychoanalysis did, however, try to put a theoretical framework in place to explain the apparent personality defects. Wilson among others realized that many of the prejudices against epilepsy were due to the fact that the earlier studies were all carried out from institutions and colonies were deeply colored by the 19th century views on degeneration, and were poisoned by the hereditarian view of epilepsy. This is undoubtedly the case. Furthermore, the idea that there are personality types associated with epilepsy not only preceded the psychoanalytical era but have persisted since, with such luminaries of epilepsy as Lennox, Gastaut, Janz and Geshwind continuing to explore these concepts.

The introduction of EEG, which was thought to "visualize" epilepsy, had by the 1950s, moved opinion away from psychological explanations of seizures, and at the same time, with the introduction of effective medications for treating psychiatric affective disorders and psychosis, psychoanalysis as a force in psychiatry diminished. Thenceforward, explanatory models have focused on neurochemistry and neurophysiology. However, it has to be admitted that, however deterministic are one's views of cerebral function, that psychological factors (albeit themselves explicable in terms of chemistry and physiology) might well play an important role in the production of seizures, and psychological processes surely have mechanisms as much as neurochemistry and neurophysiology do. Clark believed that his "thesis was really a contribution to the accumulated biologic studies of Child and his group, the physiologic biology of Herrick and Sherrington, and the psychology of Dewey and MacDougal" [18]. The psychoanalysts were intelligent and thoughtful practitioners, and their emphasis on early life experience, on considering the whole person with epilepsy and their insights into symbolism and early developments as ingredients in an explanatory model of epilepsy are a necessary correction to reductionist physiological and chemical models. From today's perspective, however, whether any of their extensive writing bears even cursory reexamination is a different question. Some of what appears to be mumbo-jumbo might simply reflect the different linguistic and explanatory styles of the period. Nevertheless, much if not all is surely twaddle, and whether, within this errant morass, there are ideas that do help explain epilepsy is a judgment I leave up to the reader to decidemake.

Declaration of competing interest

Some of this text is taken from a forthcoming book by the author on the history of epilepsy in the twentieth century.

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