

Msacer

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For many years now, the diagnostic criteria for various forms of epileptic seizures have been the object of classification efforts [1], and in view of these endeavors the question arises as to the time period when first recordings of epileptic symptoms appeared. Studies on ancient history argue that Hercules suffered from the “falling sickness” as did Julius Cesar and Alexander the Great [2]. In the course of the history of medicine the illness was known under various designations, such as Morbus sacer (holy), divine (divinus), created by God (deificus), heavenly (coelestis), related to the stars (astralis) or to the moon (lunaticus); in addition, a particular nomenclature was used in various regions, as for example “St.Veits Tanz,” “Alexander's disease,” and “St. Paul's disease [3].”

Correspondingly, the search for treatment of the illness has a long history and can be traced back to pre-biblical times [4]. After early attempts with magic mystic remedies, the Corpus Hippocraticum put into question the notion of morbus sacer as a spirit-possessing disease and the brain was identified as the origin of the illness. During the Middle Ages exorcism played a dominant role, whereas at the beginning of modern times herbal drugs were used, especially Radix Valerianae [5].

Since the middle of the nineteenth century, chemical substances came into use, at first bromide [6] and since 1912 phenobarbital [7]. This was followed by N-methyl-luminal [8] and phenytoine in 1943 [9]. Since the middle of the 20th century oxazolidine [10] derivatives were used especially for petit-mal attacks. In 1954 primidone [11] attracted attention, but the phenylsuccinimide [12] proved to be even more effective. Valproic acid [13], synthesized already in 1881, came into use thanks to Meunier's proof of its anticonvulsant action [14]. In the search for new anticonvulsant medication carbamazepine [15] was introduced in 1962 and finally the benzodiazepines, especially diazepam [16] in 1963. At present, Lamotrigine [17] and Gabapentin [18] are widely used while research on new substances continues [19].

Given the interest in both diagnostic and therapeutic aspects of the illness, it is not surprising to find epilepsy also as a frequent motif in the visual arts. One of the most important creations is a well-known work -- entitled “the transfiguration” -- by the Renaissance painter Raffaello Santi (1483-1520). Raphael apparently was inspired by three biblical passages (Matthew 17,15; Luke 9, 39; and Marc 9,18), and these narrations contain some of the earliest diagnostic criteria for epilepsy. In Raphael's work, two scenes are blended into one painting, in conformity with the biblical reports, namely Jesus Christ's transfiguration on top, and below the futile attempts made by the disciples to heal the epileptic boy who had been brought to them by his father [20].

In past interpretations of Raphael's work, no effort had been made to examine his sources of inspiration and to analyze the correct wording of each one of the biblical passages in question. For historical and for medical reasons it seems appropriate however to bring to light the precise terminology used in these descriptions of epileptic symptoms. The three biblical authors Matthew, Marc, and Luke [21] narrate -- each one in his own way -- the encounter between Jesus and the father of the epileptic boy, providing in this fashion one of the first “case studies” of epileptic seizures.

Matthew (chapter 17, verse 15), whose gospel was known already at the beginning of the 2nd century A.D. and might have been completed around 70 A.D. [22], describes the boy as “moonstruck” and states laconically that he is thrown into fire and into water. The terms used in the original Greek version are:

seleniázetai . . . píptei eis to pyr . . . eis to hydor [23].

Marc (chapter 9, verses 18-27) is the author of the shortest of the gospels and completed his work probably before 67 A.D. [24]. Marc emphasizes the anamnesis in the communicative interactions between Jesus and the father and makes the latter report that the boy has a mute spirit that the spirit attacks him, beats him, makes foam come to his mouth, grits his teeth and becomes stiff. When the boy is presented to Jesus, he is thrown into a fit, falls on the ground, rolls around and foams at the mouth. The father explains that the boy has been suffering since his childhood and that the spirit had tried to kill him by throwing him into fire and water. As soon as the spirit is driven out by Jesus, it throws its victim into a fit before it leaves the body once and for ever. The terms used by Marc are:

pneuma álon . . . katalábee . . . réessei . . . afrízei . . . trízei tous odóntos . . . xeraínetai . . . synespárxen . . . pesoon . . . ekulieto . . . afrízoon . . . ébalen . . . apolése . . . kráxas . . . sparáxas [25].

The third narrator Luke (chapter 9, verses 39- 40), allegedly a medical doctor by profession, utilized Marc's gospel for his own work which presumably was completed between the years 80 and 90 A.D. [26]. Luke reports that the spirit attacks the boy with a sudden shout, tears him forth and back, “dissipates him with foam,” hardly stops and desists from tearing him apart. The terms used by Luke are:

lambánei . . . krázei . . . sparássei . . . áfrou . . . syntríbon . . . érreexen . . . synespárxen [27].

As can be seen in this philological analysis, each one of the biblical authors describes the seizures in a different fashion. Only one symptom is mentioned by all three, namely “falling;” but even the falling is described with an idiosyncratic terminology. Matthew speaks of “falling into fire and water” (píptei), whereas Marc mentions a “falling to the ground” (pesoon), and Luke uses the term “érreexen” which signifies a “tearing back and forth” rather than a falling. The symptom “foam at the mouth” is mentioned by Marc and Luke, but again, different terms are used. Marc uses the verb “to foam” (afrízei), whereas Luke speaks of a “dissipation with foam” (sparássei autòn metà afroû). “Grinding

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(trizei) of the teeth” is reported only by Mark and vocalization, ie “shouting” (krázei), only by Luke.

Given such differences in the description of seizures provided by the three biblical authors, the question arises as to whether Raphael based himself in fact on one or all of the passages narrating the encounter between Jesus and the father or whether he depicted epileptic symptoms as they were commonly known during his own time period. Rather than a falling to the ground, foaming at the mouth or grinding with the teeth, Raphael shows the boy as standing up -- although he might be supported by his father standing behind him -- arms stretched out with muscles tensed, his eyes indicating perhaps a squint or a “déviation conjuguée,” and blue-colored tongue and lips [28].

This representation prompted modern interpreters of Raphael's work to diagnose a tonic asymmetrical seizure or a post-ictal phase [29], but on the basis of contemporary classifications one could also think of a benign myoclonic epilepsy in infancy [1]. The unusual position of the left arm could be interpreted as a hint to the relationship between left-handedness and epilepsy [30], while the position of the upward pointing right arm could be seen as an indication of the involvement of an “evil spirit” which is tearing the boy at his uplifted right arm. Regarding the repeated mention of the “evil spirit” by the biblical authors, one must bear in mind that the term “epilepsy” is derived etymologically from the Greek “*lambánōō*” which is a transitive verb and thus implies that a subject, ie the demon, is doing something to an object, ie the boy. In addition, “*epilambánōō*” denotes “to seize, to grab, to cling to,” and the verb without a prefix “*lambánōō*” has the hostile semantic connotation “to take as booty, to capture” [31].

Regardless of the various interpretations of Raphael's work, it is beyond doubt that the case reports of epileptic seizures provided by Matthew, Marc and Luke have been of particular interest not only to artists but also to theologians throughout the centuries. Theologians see in the suffering of the epileptic a metaphor for the suffering of Christ and in the healing a symbol of Christ's resurrection. Artists such as Lucas Cranach the Elder have associated epilepsy with the healing power of various saints; others have tried to depict the intensity of suffering in the afflicted [32].

At present, numerous artistic creations dealing with epilepsy in literature [33] have been examined, and the relevance of music for therapeutic purposes is being investigated [34]. A poetic approach to epileptic symptoms as reported by the New Testament authors has hitherto not been accomplished. The following poem pursues such an objectif clothing into words what Raphael had captured in his greatest painting, that should be the last one before his death. Written in classical Alexandrine verse, it renders meticulously each detail of the biblical reports highlighting in this fashion the salient features of the symptomatology contained in these archetypes of modern “case studies.”

MORBUS SACER – in biblical times (based on Matthew 17,15; Luke 9, 39; and Marc 9,18)

The name Morbus sacer was given the disease
Where cerebral foci activity increase,
Muscles contract quickly in a way named clonic,
Continuous contractions are considered tonic.
Fibrillations appear, at times conscience is lost,
Intensive convulsions the whole body exhaust.

From the most ancient times some reports can be found
Explaining what symptoms in most cases abound.

Three biblical authors have described what they saw,
A boy plagued by seizures had been cured from his flaw:

With his three disciples Jesus came from the hill,
Where he was transfigured, while night was dark and still.
At once they were approached by an unusual crowd,
A man who held his son was here and shouted loud.
The master he approached, knelt down and begged with zeal,
His epileptic son Jesus should try to heal.
“My son, my only son,” he uttered shedding tears,
“Is suffering much pain, must live in constant fears.
A spirit seizes him, makes one continued shout,
Throws him into a fit, from his mouth foam comes out.
It keeps on hurting him, will never let him go,
No one can drive him out, make his torments forego.
When he's moon struck like this, he can no longer talk,
Is thrown onto the ground, and unable to walk.
In water or in fire he is cast by the fits,
His arms and legs are stiff, his teeth he firmly grits.
Your followers I begged to drive the spirit out,
But no one could give help, knew how to go about.”

So Jesus asked the man since how long it had been
That evil fits like this he in his son had seen.
“Ever since he was small, when he was still a child,
The spirit seized the boy with powers strong and wild.
To kill him was his plan, threw him into the fire,
Fell into water too, was rolling round in mire.
Have pity on us now, I beg you help my child,
You have the power to heal, make illness be beguiled.”

When Jesus heard this plea, this desperate demand,
He knew he was obliged to give his own command.
The spirit who did harm he ordered now to leave,
Fulfilled the father's wish and strengthened his belief.
“I order you at once, come out now from the child,
Stay far away from him, that he not be defiled.”
When Jesus said these words, the spirit loudly screamed.
He knew he had to leave, his end was here it seemed.
The boy he seized with might, threw him into a fit,
One last time made him fall, but finally he quit.

The boy looked like a corpse, the crowd thought he was dead.
No blood appeared to flow, his lips had lost their red.
But Jesus took his hand, assisted him to rise,
Gave back him to the man -- all marvelled in surprise.
The boy was well again, seemed quiet and appeased,
The seizures were no more, convulsions too had ceased.

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