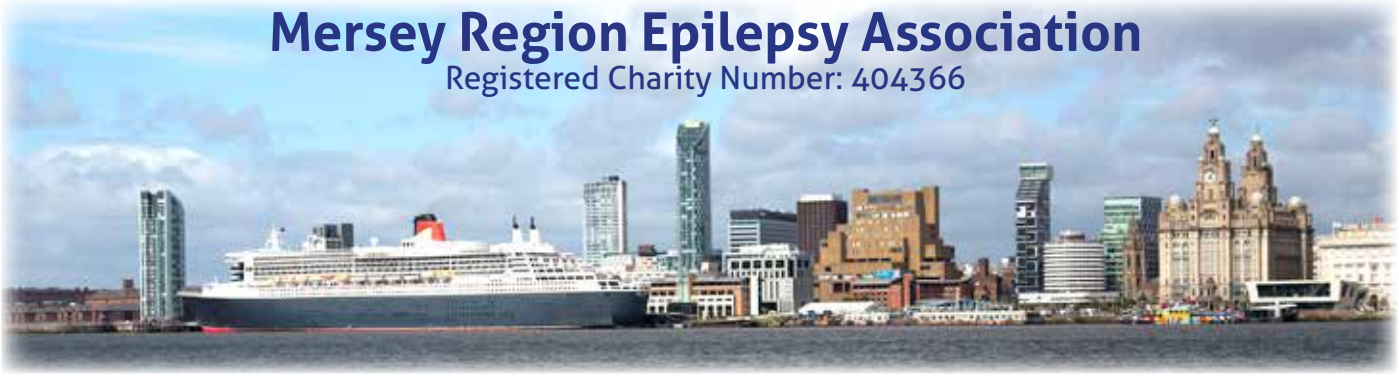
Mersey Region Epilepsy Association

Registered Charity Number: 404366



historical background of epilepsy

The Sacred Disease, or epilepsy, as it is called today is as old as man himself. As early as 2080 BC, Hammurabi, King of Babylon, made mention of it in his laws. Then, as now it assumed both medical and social importance. The laws demonstrated that the prejudice existed, even then, against the person with epilepsy.

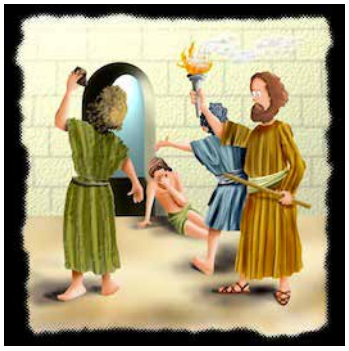
For example, two of the sections of the "Code of Hammurabi" curtailed the rights of people with epilepsy in what we would describe today as basic human rights. A person with epilepsy was not allowed to marry and could not act either as a member of a jury or as a witness in a court of law.

The Code of Hammurabi

In approximately 400 BC in the Hippocratic collection of medical writing on the Sacred Disease an alternative explanation to superstitions associated with epilepsy is given. The explanation given is that epilepsy is caused by an excess of phlegm. However, superstition remained and many strange customs evolved.

A Roman custom was to spit on seeing an epileptic seizure in the belief that this would keep the demon away and thus avoid infection. The Romans called the condition "morbis comitialis" meaning that it was the disease which interrupted the proceeding of the comitia in the assembly of the people. An explanation of the name given comes from the writings of the poet of the 3rd century Quintus Serenus
"A kind of sudden sickness, tis whose name has clung since the votes of a true count it prevents.....

For people with epilepsy life was miserable and they were subject to extreme degradation. To the public they were merely objects of horror and disgust. The Roman author Apuleius, when writing about a slave boy, Thallus, said that fellow slaves would have nothing to do with him because of his epilepsy

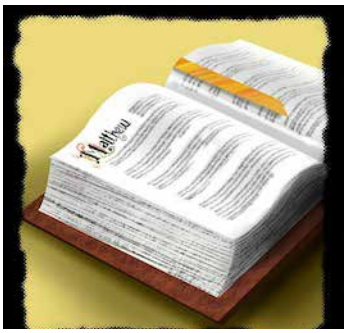


"Nobody dares to eat with him from the same dish or drink from the same cup lest he contaminate the family."

It is worth looking at the attitude which Christ displayed towards the parent of the child with epilepsy. The following passed from scripture give an accurate description of a tonic-clonic seizure (grand mal) and shows clearly the ideas prevailing of the epileptic child suffering from demoniacal possession.

"When they rejoined the disciples they saw a large crowd round them and some scribes arguing with them. The moment they saw him the whole crowd were struck with amazement and ran to greet him. "What are you arguing about with them?" he asked. A man answered him from the crowd, "Master I have brought my son to you, there is a spirit of dumbness in him and when it takes hold of him it throws him to the ground, and he foams at the mouth and he grinds his teeth and goes rigid. And I asked your disciples to cast it out and they were unable to". "You faithless generation" he said to them in reply "How much longer must I

be put up with you? Bring him to me." They brought the boy to him and as soon as the spirit saw Jesus it threw the boy into convulsions and he fell to the ground and lay there writhing and foaming at the mouth. Jesus asked the father "How long has this been happening to him?" "From childhood" he replied "and it has often thrown him into the fire and into the water in order to destroy him. But if you can do anything, have pity on us and help us." And when Jesus saw how many people were pressing round him, he rebuked the unclean spirit. "Deaf and dumb spirit" he said, "I command you, come out of him and never enter him again." Then throwing the boy into violent convulsions it came out shouting and the boy lay there so like a corpse that most of them said "He is dead." But Jesus took him by the hand and helped him up, and he was able to stand. When he had gone indoors his disciples asked him privately. "Why were we unable to cast it out?" "This is the kind" he answered "that can only be driven out by prayer" Mark 9 14-29



It must be noted that neither Jesus nor the boy's father refers to the term epilepsy. In a parallel section in Matthew 17 14-20 however the father refers to the boy as being a "lunatic." Jesus agreed that the boy was possessed by an evil spirit and, in fact, the same spirit was driven out.

The misconception that the epilepsy was a form of lunacy continued in the second and third centuries. Both philosophers and physicians connected the condition with lunar phases. This was because many other illnesses affecting the mind and showing regular patterns of disturbance were linked with the moon.

With the spread of Christianity saints were adopted as being the patrons of those afflicted with what was now called the "falling sickness". The most popular of these saints was St Valentine. Pilgrims were taken to the Priory of St Valentine in the hope of finding a cure. Many rubrics were followed, the centre of these being the celebration of as many as three masses, and it was essential that a visit was made to the grave of the Saint. Hospitals for people with epilepsy were built at such centres of pilgrimage.

Treatment for the condition became wide and varied. One of the more bizarre sets of instructions for dealing with a person during a seizure was written by a fifteenth century lecturer in medicine. Antonius Guainerius:-

"If a paroxysm comes to an epileptic, let it be your aim to prevent the ascent of vapours, and as far as possible to draw the matter downwards. Therefore perform vigorous rubbings or painful ligatures on the extremities, on the buttocks, under the knee make a slight incision with a cupping glass; and call the patient in a loud voice by his own name.

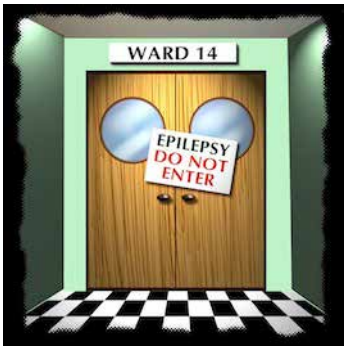
Place a wooden peg between his teeth. Also when an epileptic falls, at once kill a dog, and give the gall to the patient in any way that you can. If the one who first sees the attack urinates in his own shoe and then stirs around as if to wash it, then afterwards the patient will be entirely delivered.

He also made recommendations for the treatment to be taken during interseizure periods. Here he instructed the unfortunate sufferer to *"Avoid fear, sadness, anger and all disturbances to the soul, also coitus, unless he be a robust youth, accustomed to it; he may have intercourse lest his semen be turned into poison by being too long retained."*

It was also recommended that tablets could solve all problems of any curable epilepsy. These tablets were made from substances such as ...the rib of the left side of a man who has been hanged, or beheaded, and give it to the patient every morning for a month, it should be taken with water. Needless to say not a great deal of success was achieved.

Surgical methods of curing epilepsy were primitive in medieval times. The most popular course of action was to use cauterisation. Hot irons were applied to the head and surrounding areas. Perhaps the most understandable surgery was that of making a hole in the skull so that offending matter could make its escape.

In the seventeenth century physicians would no longer use methods such as those described by Guainerius and, while the search went on for a greater understanding and a more successful form of therapy physicians would not use such materials as blood, urine and dung etc.



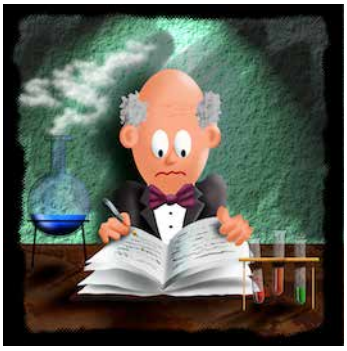
General attitudes towards the epileptic patient gradually improved during the eighteenth century. Contradictions were being made to the popular belief that the epilepsy was infectious (which even today is believed by some) and so the patients were no longer locked in wards in very bad conditions. The sight of an epileptic patient being shackled to the wall thankfully became more infrequent.

It was in the 19th century that the first major break-through in anti-epileptic therapy was achieved. The discovery of potassium bromide as an anti-epileptic drug occurred by accident. It was popularly supposed by Victorian moralists that epilepsy came from an excess of sexual activity. It was for this reason that it was generally believed that castration was the only true answer to the problem.

In the National Hospital, Queen Square, London, patients suffering from sexually transmitted diseases were being treated with bromide because of its property of causing temporary impotence. It was noted that patients who were also suffering from epilepsy showed a marked decrease in their seizure patients. Hence the discovery of the first truly anti-epileptic drug. It became so popular that enormous doses of bromide were being prescribed.

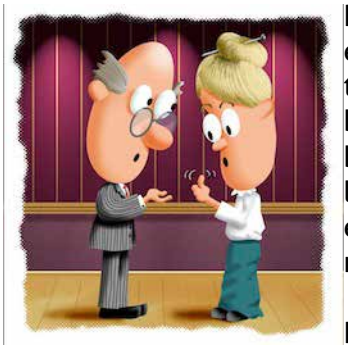
At one stage 2 tons of bromide was being used annually in the treatment of epilepsy at the National Hospital alone. Unfortunately there were side effects which are probably best described by quoting from Hammond, as he exhibited a patient in New York

"As you see he is broken down in appearance, has large abscesses in his neck and is altogether in a bad condition. But this is better than to have epilepsy."



People did not agree that these side effects were better that having epilepsy and so the use of the drug was gradually withdrawn. It was, however, a great step forward.

At about this time a German scientist, Van Boyer was experimenting with a drug, Luminal, which is better known as phenobarbitone. He was using this drug as a sedative and in this sphere it proved to be very successful. However, it was not until 1912 that another German, Alfred Hauptman, advocated its use as an anti-epileptic drug. It proved to be a great success and more details of the effect of phenobarbitone will be given later.



Probably one of the greatest contributions to a greater understanding of epilepsy was made by an English physician, Hughlings Jackson, who produced the findings of his work in 1870. His interest in the condition was stimulated by a form of epilepsy demonstrated by his wife. This unusual type of epilepsy begins with a twitch in the big toe or the thumb and spreads so that the whole leg or arm becomes involved. This type of epilepsy is now known as Jacksonian epilepsy. Jackson devoted most of his working life studying epilepsy and his name is synonymous with the condition.

In 1929 Hans Berger discovered that the minute electrical discharges from the brain could be recorded and measured on a machine called an electroencephalogram and this was to prove to be an enormous help in the diagnosis of epilepsy.

In recent years new drugs have been discovered, surgical methods have been pioneered and great advances have been made in diagnostic technology. However, there are still enormous social problems to be faced by people with epilepsy in the fields of education, employment and, not least, from the prejudices of those around them.

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