

Saint Vitus' dance: vital misconceptions by Sydenham and Bruegel

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Introduction

'There is no show like it . . . What a theatre. How strange are the actions of fools.'

Erasmus, *Praise of Folly*, 1509

Erasmus's view of mankind is echoed in Bruegel's drawing 'The Epileptic Women of Molenbeek' (Figure 1) which illustrates one of the many medical disorders named after saints: St Vitus Dance. Since classical times saints have found a place in medical textbooks. Very often, little is known of their lives and the reasons behind their association with specific diseases. The situation is further complicated by many diseases enjoying the patronage of more than one saint. It may surprise doctors and medical students who are familiar with the name Vitus and St Vitus Dance, to discover that several centuries ago Vitus experienced an identity crisis: from protector of victims of dancing mania to those suffering from a disease now known as Sydenham's chorea.

Saint Vitus

The martyr St Vitus is first mentioned in historical documents of the 5th century¹. The facts of his life

rapidly became absorbed in a complex narrative of myths, linking his name with saints Modestus and Crescentia. According to legend, Vitus became a Christian at the age of 7 (or 12) against the wishes of his father, a Sicilian senator. To escape persecution, he fled to Lucania in southern Italy with his tutor Modestus and nurse Crescentia. There he preached the gospel and then moved to Rome to expel a demon which had possessed the son of Emperor Diocletian. Because of their faith, however, Vitus and his companions were tortured. As a result of miraculously emerging unscathed from a burning cauldron, he is often represented in art immersed in a cauldron, often holding a cock, a symbol of Christ's suffering (Figure 2). Before he was martyred St Vitus prayed to God that he might protect anyone who solemnized his day (15 June) and fasted on its eve. A voice from heaven was heard to accept his prayer. An angel brought the three martyrs back to Lucania where they were buried.

In the 8th century, St Vitus' relics came to the monastery of St Denis and were later moved to Corvey in Westphalia, from where his cult spread throughout northern Europe, particularly in Bohemia where he



Figure 1. *Epileptic Women of Molenbeek*, copy after Pieter Bruegel the Elder (Albertina, Vienna)

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Figure 2. Wooden carving of St Vitus (Church of St Michael, Schwaz, Tyrol)

became its patron saint. A votive panel dated 1371 in the National Gallery, Prague represents Vitus standing to the right of the kneeling figure of Archbishop John Ocko of Vlasim and holding up the palm of martyrdom (Figure 3). He is venerated as the protector of those suffering from 'St Vitus Dance' and is the patron saint of actors and dancers. He is invoked against attacks from dogs and snakes, and that most terrible of afflictions - over-sleeping.

Dancing mania

The dancing mania or choreomania was a strange phenomenon of crowd behaviour of epidemic size



Figure 3. Detail of a votive panel of Archbishop Ocko of Vlasim (Prague National Gallery)

which appeared in medieval Europe². Crowds of people would suddenly form circles, start dancing and continue for many hours until exhausted. During the compulsive dancing participants often had hallucinations of being immersed in blood which they said made them jump very high, or of seeing the Virgin Mary³. Several authors have also reported that the dancers often suffered from abdominal swelling, 'the tympanites', for which they would wrap themselves in cloths tied around their waists^{2,3}. In severe cases the victims of dancing mania appeared to have epileptic seizures: 'their limbs jerked and they collapsed snorting, unconscious and frothing'⁴. As a result there has been frequent confusion between the dancing mania and epilepsy (the falling sickness).

The main epidemic started on St John's day (24 June) 1374 at Aix-la-Chapelle, the modern day Aachen in West Germany. The epidemic spread throughout Germany and the Netherlands, with several outbreaks in France and Britain. However, Hecker reported that there had been previous similar outbreaks^{2,4}. In 1237 at Erfurt around 100 children were seized upon by dancing and jumping along the road to Arnstadt. On arrival many were exhausted and died on the return journey home. Many more were left with a tremor for the rest of their lives. On the 17 June 1278 in Utrecht, 200 people started to dance on the Mosel bridge, which collapsed and many drowned. During severe outbreaks society appeared to be near to collapse as 'peasants left their ploughs, merchants their workshops and housewives their domestic duties to join the wild revels'².

John the Baptist was the first saint to be associated with the dancing mania. One legend tells of John's head falling to the ground when he was decapitated, linking this incident with the experiences of sufferers of epilepsy or the dancing mania. St John's day, 24 June, coincided with the festivities for the summer solstice. Pagan custom held that those who jumped through the fires lit on that day would be cured from disease for a year. After an outbreak of dancing mania in Strasburg in 1418, however, the role of protector of these dancers was taken over by St Vitus, and St John was relegated to protecting only sufferers of epilepsy.

The Strasburg Chroniclers record the events of 1418 which led to the disease assuming the name 'St Vitus Dance'. Wagon-loads of dancers and their hired attendants were ordered by the town's chief magistrate to make their way to the chapel of St Vitus in the remote Alsatian village of Zabern. They danced in the chapel, fell down in worship before an image of St Vitus and were miraculously cured. As word of this 'miracle cure' passed from one village to another, the cult of St Vitus quickly became widespread in Germany, Switzerland and the Netherlands.

Up until the 16th century the cause of the dancing mania was thought to be demoniacal and the victims required supplication from the saints. Paracelsus (1493-1541) was the first to raise the dancing mania, which he called 'chorea sancti viti', from superstition². He divided it into three types - chorea imaginativa (arising from the imagination), chorea lasciva (arising from sensual desire) and chorea naturalis (arising from corporal causes). The third type was a milder form of the disease which was more common in the 16th century. It was accompanied by involuntary laughter without howling or screaming although the victims still had an urge to dance.

Paracelsus thought that chorea naturalis developed from certain vessels which were 'susceptible of an internal pruriency, and these produced laughter, the blood was set into commotion upsetting vital spirits producing involuntary fits of intoxicating joy and a propensity to dance'. Chorea imaginativa was caused by passionate excitement which could only be cured by the victims making a self-image of wax concentrating all their sins onto it and then burning it. Paracelsus suggested that fasting and solitary confinement would cure the 'sensual irritation' provoking attacks of chorea lasciva. Hecker concluded that the 'mental plague' of the dancing mania resulted from the privations of the 13th and 14th centuries, during which Europe was ravaged by the Black Plague². Backman has suggested that the dancing mania was a manifestation of epidemic ergot poisoning⁵. The most likely explanation is mass hysteria provoked by religious superstition⁶.

At the time of Paracelsus the incidence of the dancing mania had fallen and been replaced by the milder form of the disease. Attacks were less frequent and often victims were free from an attack for a year, only to relapse around the time of St Vitus or St John's feast days. By then town authorities had organized plans to control the dancers which included musicians to steer the victims away from urban areas and employed strong men to restrain the dancers. The dancing mania gradually disappeared around the end of the 17th century. Whilst central Europe was experiencing the dancing mania, similar epidemics appeared elsewhere³. Tarantism, which was thought to develop from a bite of the tarantula, was described in Italy and Arabia. In the Tigre country of Abyssinia the dancers appeared under the name 'Tigretier'.



Figure 4. Thomas Sydenham: Engraving by Blooteling for frontispiece of *Observationes Medicae*, 1676

Sydenham's chorea

The term 'St Vitus dance' flourished after Thomas Sydenham (1624-1689) (Figure 4) used it in his description of acute chorea⁷. Moreover, in 1944 following the publication of the criteria for the diagnosis of acute rheumatic fever, which included chorea as one of the major signs, T Duckett Jones instilled the ancient St Vitus into the memories of generations of medical students⁸. Although the incidence of acute rheumatic fever has fallen over the past 20-30 years, acute chorea has almost disappeared. It is necessary to refer to medical textbooks for descriptions of the involuntary, purposeless, rapid movements of the limbs, muscular weakness and emotional lability⁹. Thomas Sydenham's account of acute chorea in his 'Schedula monitoria de novae febris ingressa' (1686) is accepted as one of the classical descriptions of clinical signs⁷.

'St Vitus dance is a sort of convulsion which attacks boys and girls from the tenth year till they have done growing. At first it shows itself by a halting, or rather an unsteady movement of one of the legs, which the patient drags. Then it is seen in the hand of the same side. The patient cannot keep it a moment in its place, whether he lay it upon his breast or any other part of his body. Do what he may, it will be jerked elsewhere convulsively. If any vessel filled with drink be put into his hand, before it reaches his mouth he will exhibit a thousand gesticulations like a mountebank. He holds the cup out straight, as if to move it to his mouth, but has his hand carried elsewhere by sudden jerks. Then, perhaps, he contrives to bring it to his mouth. If so, he will drink the liquid off at a gulp; as if he were trying to amuse the spectators by his antics.'

Why did Sydenham use the term 'St Vitus dance' for acute chorea associated with rheumatic fever? By the early 17th century epidemics of the dancing mania had started to decline. Hecker reported that the milder form of the dancing mania, the chorea naturalis of Paracelsus, was more common in the 16th and 17th centuries, and replaced the severe classical dancing mania². It is extremely unlikely that Sydenham observed any victims of the classical dancing mania, the chorea imaginativa. However there are vague similarities between the 'chorea naturalis' and Sydenham's description of acute chorea. It is possible Sydenham had seen victims of the 'chorea naturalis' and subsequently used the term for acute chorea.

Bruegel's drawing

At the same time as Sydenham was recording his observations, a series of engravings by Hondius, after the Flemish artist Pieter Bruegel the Elder, was published in Antwerp. Included in these engravings are three images inspired by Bruegel's drawing 'The Epileptic Women of Molenbeek'. This drawing records the annual procession of women, suffering from St John's disease or the 'falling sickness' on 24 June 1564 at Molenbeek, small village near Brussels. This pen-and-ink drawing in the Albertina, Vienna was once considered the work of Pieter Bruegel the Elder (c. 1527/8-1569), but because of its delicate style, it is now attributed as a faithful copy to his son and namesake Pieter Bruegel the Younger (c. 1564-1637). An inscription below the image describes the scene: these are the pilgrims who must dance on St John's day, outside Brussels at Molenbeek; and when they had jumped over a bridge they were cured of St John's

disease for a whole year¹⁰. Bruegel has depicted four women being carried by their family or hired attendants, and accompanied by musicians, moving in procession towards a small bridge. In the middle distance another sufferer is being helped over the bridge, and nearby, one woman rests on the river bank having overcome her ordeal. A faint outline of St John's chapel is discernible in the background. A question is raised by this drawing: are the women suffering from St John's disease (usually represents epilepsy, occasionally dancing mania), dancing mania (St Vitus dance), torsion dystonia, ergot poisoning or are they participating in a curative religious dance¹¹? Despite the drawing's inscription the women clearly do not have epilepsy: Bruegel's artistic observation would obviously be more important than the exact clinical diagnosis of his subjects. It would appear that St Vitus dance is the most likely diagnosis, in view of the women's abnormal postures. Moreover the procession by musicians and restraining of the women by the attendants were mentioned in several descriptions of dancing mania². By the time of Bruegel most sufferers invoked the healing powers of St Vitus rather than St John but at Molenbeek the centuries-old tradition of crossing the bridge to worship at St John's chapel ensured his continuing veneration.

Bruegel became known as 'Peasant Bruegel', not because of his peasant background - he was in fact a member of a small intellectual group of scholars in Antwerp - but because of his remarkably astute images of Flemish peasant life. According to his first biographer Carel van Mander, Bruegel often disguised himself as a peasant to visit weddings and festivals in the countryside. The two oil paintings in Vienna Peasant Wedding Dance and Peasant Wedding Feast (both 1567/8), testify to his first-hand experience of village life.

In the spring of 1563 Bruegel moved from Antwerp to set up home in Brussels with his wife Mayken Cocks. The 'naer het leven' drawings (drawings 'after life') of this period show him making repeated visits to the local villages such as Molenbeek to observe and record the customs of Flemish rural communities. There is always humour to be found in Bruegel's art and this drawing is no exception. However serious the affliction of these sufferers, Bruegel cannot help

recording the lighter side of the event. In the centre, the leading musician pokes the stick of his bagpipes in the ear of one of the women as if poking fun at her distorted movements. Bruegel has depicted six women and it may not be coincidence that one Netherlandish proverb popular at the time states: 'One woman makes a great din, two women a lot of trouble . . . and against six the Devil has no weapons'. Perhaps we are meant to be left in no doubt that whether suffering from 'St John's disease' or 'St Vitus dance' Bruegel's Epileptic Women of Molenbeek will indeed be cured.

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