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Georg Friedrich Händel's Strokes

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Abstract

Georg Friedrich Händel was a musical giant and probably the first composer to be the manager and promoter of his own works. The story of his life and his illnesses is full of myths, invented and embellished by various biographies. Existing pathographies written by authors from various specialties suggested him having suffered from psychiatric diseases like cyclothymia or mania and rheumatologic disorders like arthritis, while others tended to interpret his recurrent palsies as typical sequelae of ischemic strokes. During his last years of life, Händel was struck with blindness, which in his era had been interpreted as being due to cataracts. This led to three 'coucher' operations, all of them without any lasting effect. Although a definite diagnosis cannot be inferred from the original sources, the most plausible explanation for Händel's palsies and visual impairment may be based on one single context, i.e. cerebrovascular disease. The possible differential diagnosis will be discussed in this paper.

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Notes about Biography and Character

Händel was born in 1685 in Halle an der Saale, the son of a 62-year-old surgeon and a 33-year-old priest's daughter. He received his musical education in Halle and Hamburg. The medical history of his parents is remarkable for cerebrovascular disease in his mother and grandmother: Händel's mother died at the age of 79 years in 1730. Händel had visited her for the last time in June 1729, when she allegedly recovered from a stroke 'paralyzing the whole of her right side and her tongue' [Chrysanter, 1858, 1860, 1867]. Also Händel's grandmother Dorothea Taust is said to have died from a stroke [Flesch and Baselt, 1978–1986]. He travelled to Italy in 1706 and returned from there as a celebrity in 1710. Known as 'il caro Sassone', he was an excellent virtuoso on the harpsichord and was already renowned as a composer in the musical world



Fig. 1. Georg Friedrich Händel. Engraving after the portrait by Sir Thomas Hudson (1749). With permission of the Staats- und Universitätsbibliothek Hamburg, Germany.

of his time. He got an appointment to become the ‘Kapellmeister’ at the court of the ‘Kurfürst’ in Hannover, who ordered Händel to move to London and to work as a composer in England, which he rarely left until his death in 1759.

Händel is described as an intelligent and well-educated man, who was able to talk and to write in German (with a Saxonian accent), English, French and Italian [Deutsch, 1955]. He was said to be quite handsome as a young man, which is the reason for rumors concerning romantic affairs with young ladies of the aristocracy. Portraits of Händel as an elderly man, however, show a rather corpulent man [Rackwitz, 1986] (fig. 1), being reported to consume incredible quantities of food as well as being partial to Port and Madeira [Coxe, 1799]. As a matter of fact, Händel became easily irritable and was said to be hot-tempered in his function as a conductor and concert manager. Some reports exist of eruptions of anger, curses and verbal ‘thunder and lightning’ even on stage [Deutsch, 1955; Keynes, 1980; Mainwaring, 1760]. One day he had a discussion with an Italian singer, Ms. Cuzzoni, who refused to sing the aria ‘falsa imagine’ from Händel’s opera ‘Ottone’, ending with the words ‘*Oh! Madame, je sais bien que vous êtes une véritable Diablesse, mais je vous ferai savoir;*

moi, que je suis Belzebu, le Chef des Diables.’ (Oh, lady, I know well, that you are a true devil, but I will show you that I am Beelzebub, the chief of the devils). He finally lifted her up from the floor and threatened to throw her out of the window [Mainwaring, 1760].

What Neurological Disorder Did Händel Suffer From?

There are two main features deriving from a closer look onto Händel’s illnesses: progressive relapsing and finally progressive visual loss, first described in 1751 and recurrent palsies dating back to 1737, 1743 and 1745.

A first mention of this symptom can be read in the London *Daily Post* on April 30, 1737, when Händel was 52 years old: ‘Mr. Handel who has been some time indisposed with the rheumatism, is in [...] way of recovery’. On May 14, 1737, the London *Evening Post* reports: ‘The ingenious Mr. Handel is very much indispos’d, and it’s thought with a Paralettick Disorder, he having at present no Use of his Right Hand, which, if he don’t regain, the Publick will be depriv’d of his fine Compositions’ [Deutsch, 1955]. We get closer to the symptoms of his disease by reading a letter of James Harris to the Earl of Shaftesbury dated May 5, 1737: ‘Y^r Lord^{ps} information concerning M^r Handels Disorder was y^e first I received – I can assure Y^r Lord^p it gave me no Small Concern- when y^e Fate of Harmony depends upon a Single Life, the Lovers of Harmony may be well allowed to be Sollicitous. I heartily regrett y^e thought of losing any of y^e executive part of his meritt, but this I can gladly compound for, when we are assured of the Inventive, for tis this which properly constitutes y^e Artist, & Separates Him from y^e Multitude. It is certainly an Evidence of great Strength of Constitution to be so Soon getting rid of So great a Shock. A weaker Body would perhaps have hardly born y^e Violence of Medicines, w^{ch} operate So quickly’ [Deutsch, 1955]. The Earl of Shaftesbury made the following remark in his ‘memoirs of Händel’: ‘And when the heats of summer 1737 came on, the disorder seemed at times to affect his understandings [...] the palsy took entirely away the use of 4 fingers of his right hand and totally disabled him from playing.’ In Mainwaring’s biography we find additional information to this point: ‘The observation that misfortunes rarely come alone, was verified in Handel. His fortune was not more impaired than his health and his understanding. His right-arm was become useless to him, from a stroke of the palsy; and how greatly his senses were disordered at intervals, for a long time, appeared from an hundred of instances, which are better forgotten than recorded. The most violent deviations from reason are usually seen when the strongest faculties happen to be thrown out of course’ [Mainwaring, 1760]. Until then he recovered fairly rapidly from the palsy but there is no doubt, that

the concomitant circumstances, i.e. intermittent states of mental confusion which might even have been aphasia interpreted as confusion over a longer period of time, were a big shock for his friends and the public, worrying about Händel's future as a composer and virtuoso. As mentioned by Frosch [1989] Händel obviously sought help at this time, because there is a brief remark in Händel's hand at the bottom of a manuscript dating from the year 1737: 'Mr. Duval medecin in Poland St.'. There is no question about the fact that Händel finally made a reasonable recovery 6 months after his stroke, after receiving famous cure treatment while he was in Aix-la-Chapelle (today Aachen) for 6 weeks, staying for longer periods in the hot waters than usual [Deutsch, 1955]. This cure is mentioned in Stefan Zweig's novel based on Mainwaring's biography, culminating to the point when Händel is sitting down at the local organ improvising at full strength, to thank God for the wonderful cure [Zweig, 1929]. Although fully recovered before the end of the cure, Händel stayed for at least 6 weeks, which was according to Mainwaring 'the shortest period usually allotted for bad cases'. The London *Daily Post* announced Händel's return on November 7: '[Mr. Handel is back from Aix-la Chapelle] greatly recovered in his health' [Deutsch, 1955].

In 1742, an interesting remark can be found in the composer's own hand concerning a duet entitled 'Troppo cruda': '*Dieses ist so verwirrt geschrieben, wie mein Kopf ist, habe niehmanden es abzuschreiben verdammen wollen*' (This is as confusingly written, as my head feels, and I didn't want to make somebody copy it) [Leichtentritt, 1924]. Obviously, Händel's criticism regarding his composing performance at that point is not shared by contemporary artists since the duet 'Troppo cruda' has been recorded several times on compact disc by various artists.

A brief recurrence of similar symptoms may have occurred in 1742, when Händel traveled to Ireland. Discovered only in 1985, English oboist Simpson remarks: 'When Handel was in Dublin, he was attacked by another Paraletic stroke, while he was at dinner with my father Dubourg. it was violent and universal. it hap'ned luckily, that doctors Barry and Quin, & Mr. Nichols, Surgeon General, were present.... by violent bleedings & other evacuations, & by the immediate assistance he receiv'd he was soon perfectly recovered, & had never any return of it, tho' very apprehensive' [Mann, 1985]. To comment on this contemporary report, one can only speculate on the nature of the 'Paraletic stroke'. Most probably bleedings and other evacuations refer to therapeutic interventions like blood-letting by the accompanying doctors, which might have been useful through a reduction of hematocrit.

In 1743, Händel had had a further serious impairment of his health, preventing him from taking part at the oratorio concerts. This was the reason for a visit in Tunbridge Wells or Cheltenham for a cure, both being preferred localities for Händel's cures. In a letter written by Horace Walpole to Horace Mann

dating from May 4, 1743 it says: ‘We are likely at last to have no Opera next year: Handel has a palsy, and can’t compose’ [Deutsch, 1955]. At this point of Händel’s disease, Mainwaring comments briefly ‘some return of his paralytic disorder’ [Mainwaring, 1760], while valuable additional information can be drawn from a letter by Charles Jennens to Edward Holdsworth (April 29, 1743): ‘I hear Handel has a return of his Paralytick Disorder, which affects his Head and Speech. He talks of spending a year abroad, so that we expect no Musick next year...’ [Flesch and Baselt, 1978–1986] Indeed, Händel’s creativity may have been disturbed only until mid-June of the same year when he worked at ‘Semele’. When Jennens addresses himself to Holdsworth again on September 15 we learn that: ‘[...] Handel is perfectly recovered and has composed a new Te Deum’ [Flesch and Baselt, 1978–1986]. Interestingly, on the occasion of this brief illness, there can be found the first clues to an impairment of Händel’s speech. This is also the point, where a rheumatic disorder or peripheral nerve lesion can definitely be ruled out. The defective state of his speech may be interpreted either as a dysphasic or dysarthric component. The latter being seen quite frequently together with isolated motor impairment of the upper extremity as the dysarthria-clumsy-hand syndrome due to a lacunar infarction in the basal ganglia or brain stem, respectively. There is no exact comment on this second palsy at this point, especially on any leg involvement, but with an impairment of his speech at the same time the palsy may well have affected his right arm, this being a possible reason for Händel’s inability to compose for a short period of time [Deutsch, 1955].

A new breakdown occurred in summer 1745. Händel had made plans to visit the Harris family, but hesitated to leave his home because of his state of health (Malmesbury papers I,3; August 25, 1745). On October 24, Lord Shaftesbury states in a letter to his cousin James Harris: ‘Poor Handel looks something better. I hope he will entirely recover in due time, though he has been a good deal disordered in his head’ [Deutsch, 1955]. Again we find proof of Händel’s behavioral disorders occurring in phases of his ‘paraletick disorder’.

Händel’s Visual Impairment

Sometime in 1750, Händel lost his sight. Again, this process was disabling the great composer not at once but in recurrent ‘strokes’. Händel personally noted in the score of ‘Jephta’: *‘Biss hierher komen den 13. Febr. 1751 verhindert worden wegen relaxation des gesichts meines linken auges so relaxt’* (got as far as this on Wednesday 13th February 1751, unable to go on owing to weakening of the sight in my left eye, fig. 2) [Deutsch, 1955]. Interestingly enough, it is Händel’s left eye which gives indication of start of the ‘eye’ problems, and,

not playing on the harpsichord...’ [Deutsch, 1955]. And – strange enough for a blindness caused allegedly by cataracts, as was thought to be the case in Händel – the genius was able to play the harpsichord again as soon as the following month of April. He went to Cheltenham again until June 1751 (as reported in the *General Advertiser* on June 15, 1751) [Deutsch, 1955]. After his return, Händel consulted Samuel Sharp, surgeon to Guy’s hospital, to undergo eye surgery. Sharp diagnosed ‘gutta serena’ (drop serena) which corresponds to the modern term of amaurosis, and which was then diagnosed in cases of ‘an abolition of the sight without any apparent cause or fault in the eyes’. On August 17, 1752, we find the following note in the same journal: ‘We hear that George Friderick Handel, Esq; the celebrated Composer of Musick was seized a few days ago with a paralytic Disorder in his Head, which has deprived him from sight’ [Deutsch, 1955]. On November 4, Händel had been couched again, this time by the Princesses’ of Wales doctor William Bromfield. ‘Yesterday, George-Frederick Handel, Esq; was couch’d by William Bromfield, Esq; Surgeon to her Royal Highness the Princess of Wales, when it was thought there was all imaginable Hopes of Success by the Operation, which must give the greatest Pleasure to all Lovers of Musick’ (*General Advertiser*, November 4, 1752) [Deutsch, 1955]. A short time later we find a notice in the *Cambridge Chronicle* (January 13, 1753): ‘Mr. Handel has so much recovered his sight that he is able to go abroad’, meaning that Händel was able to go out of doors [Deutsch, 1955]. Only 2 weeks later the public was confronted with the following news: ‘Mr. Handel has at length, unhappily, quite lost his sight. Upon his being couch’d some time since, he saw so well, that his friends flattered themselves his sight was restored for a continuance; but a few days have entirely put an end to their hope’ [Deutsch, 1955]. From 1753 on his visual impairment forced Händel to dictate his compositions to Christopher Smith. However, until his last days, there are some documents existing with remarks in his own handwriting, e.g. small corrections made in his testament. There was even a third eye operation by the ‘Chevalier’ John Taylor in Tunbridge Wells in 1758 (see *London Chronicle*, August 24, 1758) [Deutsch, 1955]. Taylor was the same man, who twice couched Johann Sebastian Bach without lasting success in 1750, and may actually have induced an iatrogenic wound infection leading to Bach’s death in July 1750.

Which Medical Evidence Is There to Support These Diagnoses?

Händel’s eye problems should not be interpreted without taking his cerebrovascular disorder into account. To come as close as possible to a diagnosis, we have to discuss the differential diagnosis of cerebrovascular disease possibly

linked to repeated visual impairment followed by blindness. Knowing that Händel suffered from recurrent palsies exclusively on his right side, together with speech impairment occurring in stroke-like episodes one must consider left hemisphere embolic ischemic events, most possibly due to left internal carotid disease [Hennerici and Daffertshofer, 1995; Szabo et al., 2001]. The most exact clinical description given by The Earl of Shaftesbury who reports a ‘palsy [that] took entirely away the use of 4 fingers of his right hand and totally disabled him from playing’ occurred in 1737. This is worth a closer look, because a clinical pattern like this may well be caused by a small emboligenic stroke in the cortical hand knob, as depicted and published in the Magnetic Resonance Imaging era, and which has usually a rather benign course [Back and Mrowka, 2001; Gass et al., 2001].

Partial or monocular loss of vision in carotid disease, usually occurring ipsilaterally, results in most cases from a central retinal artery occlusion or from one or more branch occlusions. Other discussed causes of monocular visual loss in patients with carotid artery disease include ischemic optic neuropathy (rarely simultaneous episodes of monocular visual loss and hemodynamic cerebral infarctions are described as optico-cerebral syndrome), venous stasis retinopathy, and the ocular ischemic syndrome with its sequelae [Bogousslavsky et al., 1987; Chawluk et al., 1988; Goodwin et al., 1987; The Amaurosis fugax Study Group, 1990].

Retinal stroke from central artery occlusion or branch artery occlusion presents clinically with acute loss of visual acuity (Händel: ‘relaxation’ of his eye), visual field, or both. Visual loss is usually unilateral, but it may be bilateral and simultaneous, if there is bilateral carotid disease. Some patients experience transient visual loss (amaurosis fugax) before persistent visual loss occurs [Hennerici and Daffertshofer, 1995; Szabo et al., 2001]. The most common risk factor is systemic hypertension, others include cardiac disease, diabetes mellitus and a history of cigarette smoking and alcohol abuse. As far as we can determine, this is probably very close to Händel’s risk factor profile.

The onset of ischemic optic neuropathy, which is the most likely diagnosis and may involve both anterior and posterior – retrobulbar – optic pathways is usually acute. It often occurs in patients with severe carotid artery disease and may be associated with repeat ischemic cerebrovascular events prior to the blockage. There is usually painless loss of visual acuity, there may be an altitudinal, arcuate, or less common, a central field defect. Visual function stabilizes within several days to weeks, although it may improve or worsen in a stuttering fashion. Even slowly progressive ischemic optic neuropathy has been described in patients with carotid occlusive disease, sometimes due to additional venous stasis retinopathy and chronic ocular ischemia [Hennerici and Daffertshofer, 2001].

Taking into account the long course of Händel's disease with possible stroke recurrences in 1737, 1743 and 1745 and the visual problems only starting in 1751, the differential diagnosis of Händel's palsies must include lacunar strokes which show often complete recovery in function and do have recurrences with long symptom-free intervals. A recent study has shown a proportionally benign course of lacunar stroke with survival rates similar to those of the general population for the first 5 years following the first lacunar stroke with recurrent lacunar stroke occurring in 23.5% of the patients, corresponding to an annual risk of 2.4% [Staaf et al., 2001]. The suitable lacunar syndrome in Händel's case according to the classical papers may have been dysarthria clumsy hand syndrome, a 'pure motor' stroke sparing the leg [Fisher, 1967]. Since there is no single reference quoting pain as a symptom during the episodes of palsy, the repeatedly proposed diagnoses of muscular disorder, arthritis, peripheral neuropathy [Frosch, 1989], radiculopathy, brachialgia [Franken, 1997] or muscular rheumatism [Keynes, 1980] are highly unlikely. The authors preferring such diagnoses commonly seek to rule out cerebrovascular disease and argue that recurrent strokes are unlikely in Händel because of missing sequelae, obvious progression or progressive mental deterioration [Keynes, 1980]. However, all of these are certainly not obligatory for cerebrovascular disorders as mentioned above.

To summarize these pathophysiological remarks, we conclude that Händel, a man with a probable wide profile of risk factors including systemic hypertension, smoking and most probably hyperlipidemia, had recurrent palsies of his right side (following the available sources involving uniformly his upper extremity), partly with simultaneous speech impairment, either dysarthria as a component of the dysarthria-clumsy-hand-syndrome or dysphasia as a result of embolic middle cerebral artery stroke, which may have been interpreted as confusion. He may well have had a severe stenosis of his left carotid artery with recurrent embolism to the left hemisphere. Since for a certain period of time only his left eye was affected by visual loss, the suspected left carotid artery stenosis may also have been the source for embolic events within the left retina.

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