JOHANN SEBASTIAN BACH'S STROKES

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SUMMARY - Bach's origin is from the sixth generation of a large family of musicians from Mid-Germany, the Thyrings. He was famous, but more so as an organist and a specialist fine organ builder than as a composer. He married twice. From each marriage, two well-known musician-composers were born: Wilhelm Friedmann and Carl Phillip Emanuel from the first marriage, and Johann Christoph Friedrich and Johann Christian from the second. The Bachs were destined to live into their sixties, a good age at that time, and several lived longer. Bach was healthy and shortsighted, and a strong man. He probably had high blood pressure, and maybe diabetes. His vision was said to be damaged by writing and copying notes in the dark from his early days. It is possible he had a mild stroke before 1746 and another one in 1749 which, with his previous blindness, affected him seriously. At that time, while touring Europe, "chevalier and gentleman"- an Englishman oculist and operator, John Taylor came to Leipzig. Bach was operated on twice in 1750. His vision did not improve and inflammation developed, probably glaucoma with postoperative infection. He had several cerebrovascular risk factors, i.e. age, obesity, possible hypertension and diabetes, and he died in 1750 after another stroke complicated by pneumonia. His grave was known only by oral tradition and was mentioned in just one local newspaper as an incidental remark. It took more than one hundred years after his death for his grave to be found nearby St Thomas Church. His remains were identified by Professor His together with Professor Politzer, an authority in the field of

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Bach's origin is from a large family of musicians from mid-Germany, Thyringa, as far back as Hans Bach in the 16th century¹. At the beginning of the 17th century, the Bach family reached its peak with the sixth generation of musicians, especially Johann Sebastian². After Bach's sons, the musical activity of the family and their involvement in music decreased³. Johann Sebastian Bach was born on March 21, 1685, in Eisenbach. At school he was educated in basic musical and theological-humanistic science4. He learnt most from his father and later from his brother, to whose home he moved after his mother's early death. After he grew up, he took outstanding mu-

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sical appointments at Weimar, Arnstadt and Mühlhausen, and he traveled throughout Germany to get acquainted with the Baroque music trends and opera⁵. From 1708 he worked in Weimar as a court musician and later on as a concert maestro composing celebration music⁶. Then he joined the Duke of Cöthens as a court musician, composing non-clerical and instrumental music. In 1723, he went to Leipzig as Director Musices where he was composing as a cantor of St Thomas Church, mainly clerical music, cantatas, masses, passions and oratories. This was the period most suiting his nature, when he felt most satisfied. He married twice. As a young man he married his cousin Maria Barbara Bach and they had seven children. Ten years after she had died, he married again in 1721 to Anna Magdalena Wulcken, the Duke's singer of the Cöthens court. They had thirteen children. He was very close to both his wives and a good father to his numerous children, each of whom was taught about music.

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From each marriage, two well-known musicians-composers were born: Wilhelm Friedmann and Carl Phillip Emanuel from the first marriage, and Johann Christoph Friedrich and Johann Christian from the second. Many of his children from each marriage died in early childhood. In adolescence several of his children suffered from alcoholism and were mentally handicapped. Very few of his children married and therefore in the two next generations male descendents became extinct, while female descendants still live naturalized in Poland. Genetically, the Bachs were destined to live to their sixties which was a good age at that time, and a few lived longer. They were robust and often very hasty, especially Johann Sebastian who defended his own point of view but sometimes he was stubborn, frequently conflicted with his milieu, especially with his superiors. He was appreciated throughout his country, but more as an organist and a specialist for organ building than as a composer. His sons were more popular worldwide as composers than he. It took a hundred years from his death while his work was discovered again, by Felix Mendelssohn. Bach was healthy, shortsighted from childhood, and a strong man. According to his temper, nature and stature, he probably had high blood pressure and diabetes was suspected. His vision was said to be damaged with writing and copying notes in the dark from his early days. In one of his rare authentic portraits from 1746 (by Elias Gottlob Haussmann), oral asymmetry is obvious, suggesting a right facial palsy, probably due to a stroke. The portrait



shows obesity. During his last two years, his vision deteriorated rapidly with pain in his eyes⁷, and he was advised to consult an oculist. It seems that his general condition was bad even earlier because of reduction of his activities in the last five years of his life rounding up his creativity. By the end of 1749 he was not able to write anymore. That could be due to another stroke or/and worsening of his vision. He was forced to dictate his notes. At that time, touring Europe, a famous, bombastic, public broker, considered a charlatan but a wise operator, chevalier and gentleman, came to Leipzig - an Englishman named John Taylor⁸. At that time he was famous as the operator-inventor of a needle for grey dimness on the eyes cataract. Treating many eye illnesses, he cut too often, causing damage. He was also nicknamed the Münchausen of medicine⁹. He was very arrogant and described his time in Leipzig as follows: "I saw all kind of various animals, like camels, dromedaries, etc. but in Leipzig I operated a famous old music-master, I saved his vision, he was educated together with Händel whom I operated later"10. It is one of those historic coincidences. Both composers turned blind at the same age, both were operated on "because of the cataract", and both operations undertaken by the same "specialist" at a distance of a "thousand kilometers" failed. Händel probably suffered from a stroke with central blindness. Bach probably had hemorrhagic glaucoma, characterized by pain and sudden onset. That implies that neither had a cataract. In 1749 Bach had his first talk with Taylor and was operated on twice in 1750. The first operation was at the end of March and the second one in April 1750. His vision did not improve (despite Taylor's statement)

and inflammation developed. Berlin newspapers reported in two issues a story from the Leipzig report, that Taylor's operation was fully successful with great satisfaction. Nevertheless, in May of the same year a Rostock doctor Eschenbach denied these two favorable reports on Taylor's operations and listed complications in particular cases, including Bach's inflammation. On August 3, 1750, another newspaper reported that several days earlier JS Bach had died from adverse consequences of Taylor's eye operation. The only consolation in Bach's case was that if he really had suffered from hemorrhagic glaucoma, none would have been able to help him anyway. After those failed operations Johann Sebastian spent his days in a dark room, depressed, and he dictated some of his compositions. In mid-July 1750, he suffered a fatal stroke complicated by pneumonia. A couple of hours before he died it seemed that he could see again, perhaps hallucinations. Two famous local doctors tried to help him but without success. Johann Sebastian Bach died in the evening on July 28, 1650 from stroke and was buried in the nearby St Thomas Church¹¹-¹³. The place of his grave was only known by oral tradition and was mentioned in just one local newspaper as an incidental remark. It was also known that the coffin was made of oak. It helped when the graveyard was dug over. Three coffins of the type were found but only one corresponded to Bach's description: the skull of an elderly man was found with strong bones and other details that could have been in concordance with Bach's portraits. The anatomy Professor His employed at that time the sculptor Seffner to make a portrait-like bust over a plaster cast of the skull and its features resembled those of the great composer^{14,15}.

The skull was further examined by Professor Politzer, the authority in otology at the time. He discovered particularly pronounced temporal bones and fenestra rotunda; also, the first coil of the cochlea was noted to be unusually large, indicating a unique development of the cochlear ganglion. Impressions of the fusiform and inferior temporal gyres on the skull suggested the strong development of cerebral function of the opposing areas of the brain, suggesting this should be related to Bach's perfect pitch and extraordinary musical genius¹⁶.

According to available sources Johann Sebastian Bach did not have serious health problems until the age of sixty, when symptoms of cerebrovascular disease occurred. His cerebrovascular risk profile included age, obesity, possible hypertension and diabetes that led to his fatal stroke in 1750. Furthermore, in the last two years

of his life he had sight impairment and finally became blind, probably from hemorrhagic glaucoma with two unsuccessful operations performed by John Taylor.

After Bach's death, his already displaced sons took away their part of legacy. Bach's second wife and unmarried daughters stayed together and died soon as their only income came from social support. Even for respected and honored musicians and composers, the baroque era was still not a time of high standards.

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Sažetak

MOŽDANI UDARI KOD JOHANNA SEBASTIANA BACHA

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Johann Sebastian Bach pripadao je šestom naraštaju obitelji glazbenika podrijetlom iz središnje Njemačke. U svoje doba bio je poznatiji po umijeću izgradnje i sviranja orgulja nego po svom skladateljskom talentu. U svakom od njegova dva braka rođena su dva sina koji su kasnije nastavili obiteljsku skladateljsku tradiciju: Wilhelm Friedmann i Carl Phillip Emanuel iz prvog braka, te Johann Christoph Friedrich i Johann Christian iz drugog braka. U obitelji Bach prosječna životna dob bila je oko šezdeset godina, što je za tadašnje prilike bilo više od prosjeka, tek je nekoliko pripadnika obitelji živjelo duže. Johann Sebastian Bach je bio zdrav, nizak, ali jak čovjek još od najranijih dana. Najvjerojatnije je imao povišen krvni tlak, a moguće je da je bolovao i od šećerne bolesti. Vid mu je bio oslabljen, jer je još od djetinjstva pisao i kopirao note u mraku. Prije 1746. te opet 1749. godine je najvjerojatnije prebolio moždani udar. Posljednje dvije godine života Bach se suočava sa znatnim slabljenjem vida. U to doba u Leipzigu se na proputovanju Europom zatekao engleski okulist-operater "kraljevski gentleman" John Taylor koji je Bacha operirao dva puta 1750. godine. Bachov vid se nije oporavio, naprotiv, došlo je do infekcije. Prema anamnezi i tijeku bolesti najvjerojatnije se radilo o glaukomu s poslijeoperacijskom infekcijom. Bach je imao nekoliko čimbenika rizika za nastanak cerebrovaskularne bolesti – dob, prekomjernu tjelesnu težinu, moguće hipertenziju i šećernu bolest. Tijekom 1750. Bach ponovno doživljava moždani udar kompliciran upalom pluća, što je dovelo do njegove smrti. Bachovo posljednje počivalište ostalo je zabilježeno tek slučajnom bilješkom u lokalnom glasilu, te u usmenoj predaji. Prošlo je više od sto godina dok njegov grob nije otkriven nedaleko od crkve St. Thomas. Bachovi ostaci identificirani su uz pomoć Profesora Hisa koji je bio vodeći autoritet u anatomiji te Profesora Politzera, vodećeg autoriteta u otologiji.

Ključne riječi: Povijest medicine, 18. stoljeće; Cerebrovaskularne bolesti – etiologija; Poznate osobe; Johann Sebastian Bach; Portreti; Prikaz slučaja