

*George E. Ehrlich*

### **New Thoughts on Mozart's Terminal Illness**

Mozart lived at a time when more children died than survived. He and his sister were the only two of seven to reach maturity. Only two of his own six children did. So we may assume that infectious diseases were of greater importance than cancers and heart disease, most people not reaching the ages where these latter become important causes of death. And yet some survived to ripe old ages. Statistical life expectancy was low, because infant and child mortality reduced the average for life span; but, for those surviving childhood and not succumbing to one of the epidemics that often swept across Europe, the actual life span was similar to that of today. One had to be hardy and lucky to make it.

Mozart must have been hardy. He developed many of the diseases that were epidemic in the latter half of the eighteenth century, and his travels exposed him to endemic diseases against which he surely had to be less resistant than the local population. He was treated with the meagre remedies of the day, many of which we know by name but not by constituents (some being the closely guarded private property of apothecaries). Others were nonspecific. (The little jingle that Goodman and Gilman resurrected, "Wenn man nicht weiss wieso und warum / gibt man jod kalium: If you don't know the why and wherefore / give potassium iodide therefore" [my translation] is an example.) Bleeding and purging were widely used; they were the preferred treatments of Eurocentric physicians in the Americas, like Benjamin Rush of Philadelphia, a signer of the Declaration of Independence of the United States. Leopold Mozart believed strongly in bleeding. Despite the beginning of the end

for Galenic medicine, based as it was on humoral theory, the pioneering work of Harvey and Sydenham had not yet converted physicians from their two-thousand-year-old philosophically-based precepts. Just as Aristotle thought a pound of feathers would fall more slowly than a pound of lead because he didn't test the concept, so medicine was largely abstract. Times were changing, of course, but the gentlemen of the times were still described as choleric, melancholic, sanguine or phlegmatic, depending on the dominant humor coursing in their veins. And the dropping of humors still explained gout (presumably derived from gutta, Latin for drop), their flow, rheumatism (from the Greek, Rheum, a watery discharge with its telltale Rho, for flow, as in Rhine, Rhone, and diarrhea, gonorrhea, and logorrhea). A sequel of dampness, rheumatic diseases had already been refined to include the arthritides, pleurisy, and similar disorders of unknown cause. Shakespeare had summarized it well: "The winds . . . have suck'd up from the sea / Contagious fogs . . . / Therefore, the moon, the governess of floods, / Pale in her anger washes all the air / That rheumatic diseases do abound." Which permits the charming malaprop of Mistress Quickly: ". . . as rheumatic as a dry piece of toast."

Dryness was associated with arthritis: as Prospero commands, "that they grind their joints / With dry convulsions, shorten up their sinews / With aged cramps." But gout was the arthritis of misplaced humors (and a hundred years before Mozart, the gouty corpulent bibulous father unable to prevent his daughter's elopement was an object of derision to be laughed at in Restoration comedies; being gouty, being afflicted with the humors, being humorous, being funny). The nosology was still uncertain. "A pox of this gout! or, a gout of this pox! for the one or the other plays the rogue with my great toe." Gout—yes for Falstaff, obese and full of sack (who knows, perhaps the lead-containing port wine that led to a century of gouty aristocrats in England during the French wars that cut off the supply of claret was at work even then). Pox—the large pox, syphilis, not the small pox—would have done as well for this wenching knight; although one may question whether the venereal route was the only transmitter of syphilis in the early sixteenth century, when it could claim the upright Erasmus of Rotterdam as a probable victim as his medical history and his skeleton bear witness (Appelboom, et al).

By the end of the seventeenth century, rheumatoid arthritis had probably been described, not by Sydenham who unlocked the restrictive

taxonomy earlier but by William Musgrave of Exeter. But to note it and to understand it are two different things. Heberden was still left to wonder ten years after Mozart's death (although Landré-Beauvais's asthenic gout of 1800 probably was the first full description) and not for another 40 or so years was the disease generally accepted and later, by Garrod, named. It was a registrar of Garrod who described the juvenile onset of the disease as a systemic presentation, characterized by high spiking fevers and evanescent skin eruptions that would bear his name, Still's disease.

We think of rheumatoid arthritis today as a progressive, potentially crippling, chronic disease whose morbidity has long been recognized, its associated mortality only recently acknowledged. And the juvenile variety has been subdivided (no longer even called rheumatoid arthritis by English and European clinicians unless it resembles in behavior and course the adult disease). One category, the acute systemic disease Still proffered, is of major interest here.

Mozart may well have contracted many of the infectious diseases prevalent in an unhygienic and medically defenceless Europe of his day. He was often sick, sometimes critically ill so that a priest needed to be called to give the holy sacrament of extreme unction, as in 1765 in the Netherlands when he appeared moribund and the Prince of Orange, Willem V, sent his retired court physician, Schwenke. What Schwenke and his assistants, Haymans and Velze, and the apothecary Damen gave Mozart and his sister, who had fallen ill earlier with the same symptoms, is not certain. But the typhoid fever or louse-borne typhus diagnosis generally assumed today, endemic in the Netherlands at the time, does not entirely satisfy the clinical description that included stupor, blood poisoning, sluggish pulse, delirium, pneumonitis, and bleeding mouth: "His tongue was dry as wood and dirty. His lips thrice shed their skin, which was hard and black" (Jansen); Stevens-Johnson syndrome, more than likely, complicating the infectious disease and its treatment. Among other remedies, the Smyrna balsam of a quack doctor, Ali, a Turkish practitioner, was also used. Mozart recovered, but weak and emaciated. It was then and coincident with other less well described febrile illnesses that arthritis in the lower extremities was noted. Mozart had to cancel many concerts during his childhood and adolescence because of illness, often characterized by arthritis. Did he have Still's disease? In the

majority of instances, it will not lead to chronic arthritis, although some reminder of the disease remains. A shortened neck, a recessive chin—these stigmata may remain, and the pictures we have of Mozart, his habitus and appearance certainly suggest it. In Europe, including the British Isles, even today this disease is complicated by amyloidosis in an astounding proportion of cases, and amyloidosis leading to renal failure a prominent cause of death. Why this conjunction has not transferred to North America as well is a mystery; we rarely find it in juvenile rheumatoid arthritis even later in adult life. But if, among his bouts of acute infectious diseases Mozart had developed febrile rheumatoid arthritis and later amyloidosis, his terminal illness would be explainable.

In 1985, at the Sixteenth International Congress of Rheumatology in Sydney, Australia, I also suggested Behcet's disease as a possible diagnosis for much that happened to Mozart. But the disease, not the syndrome, is fairly well restricted to the inhabitants of the Silk Route, from Japan to the Mediterranean. Turks, Arabs of Syria and Iraq, Persians, Chinese, Koreans and Japanese, and the peoples of the Mediterranean littoral from Egypt to Tunisia and in Greece and adjacent Bulgaria—in other words, where a genetic marker, HLA B5, is spread. These peoples, save the Japanese, live where genes can spread by travel and warfare. The Japanese, isolated and never successfully invaded, nevertheless share linguistic roots with the Turks, and therefore, probably also common ancestry in the Altai area of Asia. Behcet's syndrome can afflict all others; it presents similarly, shares many of the same features, but one can usually find some other identifiable disease in association and probably at cause. This would include colitis, regional enteritis, Whipple's disease, pustulotic arthro-osteitis, psoriasis, Reiter's syndrome, and a host of other disorders. So even if many of Mozart's symptoms and signs fit, the diagnosis of the syndrome means a search for the underlying disease must go on.

Is it important to diagnose at a distance what ended the life of this paradigm of music? And if we could know, would it make a difference? Would knowledge of our contemporary classification of disease have saved Mozart? And if he had Still's disease complicated by amyloidosis, would he have fared better in our hands? We won't know; we are even deprived of the opportunity to try to type his genome (it could be done) because of his unattended burial so that no one knows which might be his

skeletal remains. If he was poisoned, it was likely by his medicines, not by Salieri or Süßmayr or Hofdemel or other candidates. What he needed was dialysis; what he got was bleeding.

## WORKS CITED

- Appelboom, T., et al. "Can a Diagnosis be Made in Retrospect? The Case of Desiderius Erasmus." *Journal of Rheumatology* 13 (1986): 1181-4.
- Bywaters, E. G. L. "History of Books and Journals and Periodicals in Rheumatology." *Annals of the Rheumatic Diseases* 50 (1991): 512-6.
- Davies, P. J. "Mozart's Illnesses and Death." *Musical Times* 125 (1984): 437-45.
- Ehrlich, G. E. "Behcet's Disease: Now You See It, Now You Don't." *Comprehensive Therapy* 18.9 (1992): 25-27.
- \_\_\_\_\_. "Mozart's Terminal Illness." XVI International Congress of Rheumatology. Sydney, Australia, 1985.
- \_\_\_\_\_. *Rheumatology in the 17th Century, in Art, History and Antiquity of Rheumatic Diseases*. Ed. T. Appelboom. Brussels: Elsevier, 1987.
- \_\_\_\_\_. "Shakespeare's Rheumatology." *Annals of the Rheumatic Diseases* 26 (1967): 562-3.
- Fraser, K. J. "Anglo-French Contributions to the Recognition of Rheumatoid Arthritis." *Annals of the Rheumatic Diseases* 41 (1982): 335-43.
- Garrod, Alfred. *The Nature and Treatment of Gout and Rheumatoid Gout*. London: Walton and Maberley, 1859.
- Jansen, K. *Mozart in the Netherlands*. Trans. L. Vanderheij. NRC Handelsblad, 1992.
- Landon, H. C. Robbins. *1791, Mozart's Last Year*. London: Thames and Hudson, 1988.