The diagnosis of art: Rachmaninov's hand span

In 1943 the Russian virtuoso pianist, composer, and conductor Sergei Vasilievich Rachmaninov (1873–1943) became ill in the middle of a concert tour and was admitted to a hospital in Los Angeles. When cancer was diagnosed, he looked at his hands and whispered, 'My dear hands . . . Farewell, my poor hands.' Were his hands the key to his suffering?

Rachmaninov is perhaps best known for his second, C minor, piano concerto, popularized in the films *Brief Encounter* (1945) and *The Seven Year Itch* (1955); the *adagio sostenuto* provided inspiration for Eric Carmen's 1976 pop song *All By Myself*, later covered by Celine Dion and mimed with passion by Renée Zellweger in the opening scenes of *Bridget Jones's Diary* in 2001. The third, D minor, piano concerto, already popular, was given further exposure by David Helfgott, as portrayed in *Shine* (1996). In his lifetime Rachmaninov's prelude in C sharp minor was so popular as a concert encore that he grew to hate it. And works such as the *Rhapsody on a Theme of Paganini* and the *Symphonic Dances* cemented his popularity. His technical perfection was legendary. It was said that his large hands were able to span a twelfth (an octave and a half or, for example, a stretch from middle C to high G).

The size of his hands may have been a manifestation of Marfan's syndrome, their size and slenderness typical of arachnodactyly.[1,2] However, Rachmaninov did not clearly exhibit any of the other clinical characteristics typical of Marfan's, such as scoliosis, pectus excavatum, and eye or cardiac complications. Nor did he express any of the clinical effects of a Marfan-related syndrome, such as Beal's syndrome (congenital contractural arachnodactyly), Ehlers–Danlos syndrome, homocystinuria, Stickler syndrome, or Sphrintzen–Goldberg syndrome. There is no indication that his immediate family had similar hand spans, ruling out familial arachnodactyly. Rachmaninov did not display any signs of digital clubbing or any obvious hypertrophic skin changes associated with pachydermoperiostitis.

Acromegaly is an alternative diagnosis. From photographs of Rachmaninov in the 1920s and his portrait by Konstantin Somov in 1925 (Figure 1), at a time when he was recording his four piano concerti, the coarse facial features of acromegaly are not immediately apparent. However, a case can be made from later photographs.

Rachmaninov's repeated bouts of depression[3] are also consistent with a diagnosis of acromegaly. On 27 March 1897, his *First Symphony* was poorly received in an under-rehearsed performance conducted by an inebriated Aleksandr Glazunov. This event, from which Rachmaninov fled in horror, is said to have triggered his first major episode of depression, which temporarily brought his composing career to a standstill: 'all my hopes, all belief in myself, had been destroyed.' It would not be until the latter half of 1900 that he returned to composition, with the help of a hypnotist, Dr Nikolai Dahl, to whom he dedicated his *Second Piano Concerto*, the second and third movements of which he brilliantly performed in December of that year. His second major bout of depression began during the Second World War, when he was living near Los Angeles, probably related to worries over the safety of one of his daughters and grief over the deaths of relatives and friends in the war.

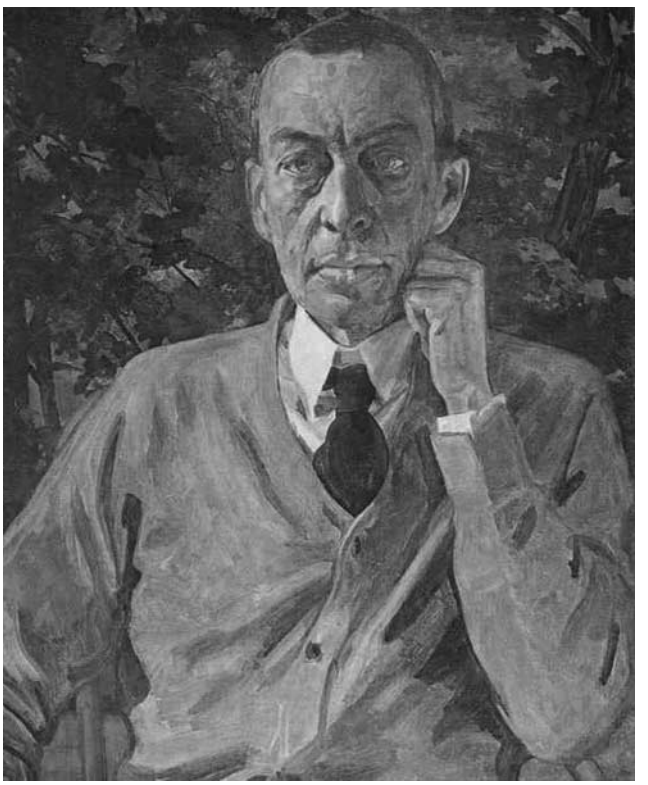

Figure 1 **Portrait of Sergei Rachmaninov (1925) by Konstantin Somov; oil on canvas. The State Russian Museum, St. Petersburg, Russia**

During a heavy concert schedule in Russia in 1912, he interrupted his schedule because of stiffness in his hands. This may have been due to overuse, although carpal tunnel syndrome or simply swelling and puffiness of the hands associated with acromegaly may have been the cause. In 1942, Rachmaninov made a final revision of his troublesome *Fourth Concerto* but composed no more new music. A rapidly progressing melanoma forced him to break off his 1942–1943 concert tour after a recital in Knoxville, Tennessee. A little over five weeks later he died in the house he had bought the year before on Elm Drive in Beverly Hills.

Melanoma is associated with acromegaly[4,5] and may have been a final clue to Rachmaninov's diagnosis.

But then again, perhaps he just had big hands.

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Bad Medicine: Doctors Doing Harm Since Hippocrates

David Wootton
304pp Price £16.99 ISBN: 0192803557
Oxford/New York: Oxford University Press

Historian David Wootton seeks to restore the concept of progress to medical historiography. Contrary to the post-modernist fashion, Wootton argues that, in terms of alleviating pain, shortening illness and prolonging life, practitioners of modern medical science have made major advances on their predecessors.

Yet Wootton's embrace of medical progress is heavily qualified by his strictures on the ambivalent role of the medical profession in the advance of medical science. Thus, he emphasizes that medicine's positive contribution to humanity began scarcely a century ago. In the 2500 previous years of medical practice, with their 'bleeding, purging and vomiting', doctors were more likely to do harm than good. Furthermore, he believes that his readers will be 'surprised to discover just how limited the achievements of modern medicine are'.

Bad Medicine is not so much a celebration of medical progress as a study of the ways in which progress has been frustrated by the psychology and culture of the medical profession. Wootton shows, for example, how the main elements of the germ theory were in place by the early 18th century. Yet it was not until a century later that the germ theory of putrefaction was established (1837) and another 30 years before Lister's application of the theory to surgery (1865). But if Lister gets the credit, several generations of his colleagues must take the blame for the long delay.

Debunking the doom-mongers, Wootton recognizes the contribution of modern medicine to increased life expectancy. Citing John Bunker's important study, he suggests that two of the 23 years increase in longevity between 1900 and 1950 were attributable to medicine, and three of the 7 years increase between 1950 and 2000. He concludes that medicine has contributed less than 20% of the overall 20th century increase in life expectancy (five out of 30 years), 'not nearly as much as most of us believe'. After emphasizing 2500 years of failure, this seems a somewhat grudging acknowledgement of this dramatic reversal in medical fortunes. Not only did bad medicine turn good in the 20th century, it got better all the time: whereas medicine contributed less than 10% of the longer life expectancy in the first half of the century, in the second half it accounted for more than 40% of the improvement.

While Wootton challenges convention in recognising medical progress, he is strikingly conventional in his distaste for the spirit of experimentation in medical science. Thus he disparages early medical researchers' involvement in dissection and vivisection as 'mangling the dead, torturing the living'. He condemns studies carried out by Claude Bernard on animals as 'gruesome and grotesque'. But the price of progress in science—today as in the past—is that scientists are obliged to challenge popular prejudices to extend the frontiers of knowledge. No doubt the doctors of old pursued many mistaken theories and inadvertently harmed many patients. But the good medicine of today and the better medicine of the future are inextricably the legacy of the bad medicine of the past.

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