

Viewpoints

Did the “Woman in the Attic” in *Jane Eyre* Have Huntington Disease?Elizabeth A. Coon^{1*} & Anhar Hassan¹¹ Department of Neurology, Mayo Clinic, Rochester, MN, USA

Abstract

Background: References to neurologic disorders are frequently found in fictional literature and may precede description in the medical literature.**Aim:** Our aim was to compare Charlotte Brontë’s depiction of Bertha Mason in *Jane Eyre* to the tenets set forth in George Huntington’s original essay “On chorea” with the hypothesis that Mason was displaying features of Huntington disease.**Results:** Charlotte Brontë’s 1847 Victorian novel *Jane Eyre* features the character Bertha Mason, who is portrayed with a progressive psychiatric illness, violent movements, and possible cognitive decline. Similar to Huntington’s tenets, Mason has a disorder with a strong family history suggestive of autosomal dominant inheritance with onset in adulthood, and culminating in suicide.**Conclusion:** Brontë’s character had features of Huntington disease as originally described by Huntington. Brontë’s keen characterization may have increased awareness of treatment of neuropsychiatric patients in the Victorian era.**Keywords:** Clinical neurology history, Huntington disease, ethics**Citation:** Coon EA, Hassan A. Did the “woman in the attic” in *Jane Eyre* have Huntington disease? Tremor Other Hyperkinet Mov. 2015; 5. doi: 10.7916/D8ZS2VN8*To whom correspondence should be addressed. E-mail: coon.elizabeth@mayo.edu**Editor:** Elan D. Louis, Yale University, USA**Received:** May 1, 2015 **Accepted:** June 29, 2015 **Published:** July 21, 2015**Copyright:** © 2015 Coon et al. This is an open-access article distributed under the terms of the Creative Commons Attribution–Noncommercial–No Derivatives License, which permits the user to copy, distribute, and transmit the work provided that the original author(s) and source are credited; that no commercial use is made of the work; and that the work is not altered or transformed.**Funding:** None.**Financial Disclosures:** None.**Conflict of Interest:** The author report no conflict of interest.

Introduction

George Huntington’s essay “On chorea” described adult-onset hereditary chorea in 1872.¹ However, several decades preceding Huntington’s description, familial cases of chorea in children and adults with involuntary movements, speech disturbances, and progressive dementia were recognized and published.^{2,3} During this period of enhanced recognition of what is now termed Huntington disease, Charlotte Brontë wrote *Jane Eyre*, which was published in 1847 and featured the enigmatic “woman in the attic,” Bertha Antoinetta Mason. Mason suffered from a progressive and familial psychiatric illness with violent movements.⁴ We hypothesize that Mason’s character had features of Huntington disease, as she fulfills the tenets put forth by Huntington in his seminal essay. Furthermore, Mason’s characterization illustrates how patients with neuropsychiatric illnesses were treated in Victorian England.

Discussion

Bertha Mason

Bertha Antoinetta Mason, Edward Rochester’s clandestine first wife, was an essential component to the plot and character

development in *Jane Eyre*. Rochester discloses the identity of the woman locked in the attic of his Thornfield Hall as his wife after a thwarted attempt to marry Jane Eyre. Rochester was introduced to Mason when she was in her late twenties after he had traveled to the West Indies to court her. Mason was initially described as behaving appropriately: she “flattered” Rochester and “had lavishly displayed for [his] pleasure her charms and accomplishments.” Rochester and Mason were quickly betrothed for financial reasons and it was only after the wedding that Rochester learned of Mason’s family history of “idiots and maniacs through three generations.” During the first 4 years of his marriage to Mason, Rochester describes the emergence of “vile discoveries” in her “cast of mind.” By the time that Mason was in her early thirties, Rochester describes an escalating illness: “her character ripened and developed with frightful rapidity.” This depiction of a progressive familial disorder with behavioral and cognitive decline with violent movements is similar to Huntington’s original essay describing Huntington disease.

Huntington's "On chorea"

Huntington read his seminal essay to the Academy of Medicine at Middleport, Ohio on February 15, 1872.¹ This essay reviewed clinical features of chorea, suspected causes, and current medical treatments. The final section of "On chorea" is devoted to describing "hereditary chorea" from cases that he observed in his grandfather's, father's, and own medical practice on Long Island, New York. Huntington described "three marked peculiarities in this disease: 1. Its hereditary nature 2. A tendency to insanity and suicide 3. Its manifesting itself as a grave disease only in adult life."

Did Bertha Mason fulfill Huntington's three tenets?

Of its hereditary nature. Huntington penned that this form of chorea was "confined to certain and fortunately a few families, and has been transmitted to them, an heirloom from generations away back in dim past." He keenly observed autosomal dominant inheritance by stating "it never skips a generation to again manifest itself in another ... but if by chance these children go through life without it, the thread is broken." In *Jane Eyre*, Mason's family history was described as "idiots and maniacs through three generations!" Rochester extrapolated on the psychiatric and cognitive disease in Mason's family: "Her mother, the Creole was both a madwoman and a drunkard" and her "younger brother too, a complete idiot." In contrast to Huntington's description, Brontë writes that Mason's "excesses" and her familial disease were attributed to "the germs of insanity."

A tendency to insanity and suicide. The second of Huntington's tenets relates to behavioral and cognitive decline: "As the disease progresses the mind becomes more or less impaired, in many amounting to insanity." In Brontë's work, Rochester reports continued "outbreaks of her violent and unreasonable temper." Mason is described by Rochester as having a "cast of mind common, low, narrow and singularly incapable of being led to anything higher." Cognitively, she is labeled as having a "pigmy intellect" and frequently referred to as a "lunatic." This suggests she has developed a behavioral disorder with cognitive decline. However, Mason was not showing signs of florid dementia. For example, immediately before her death, she was able to navigate to the chamber where Jane had slept months before, illustrating preserved visuospatial and contextual memory. Similarly, she recognized the symbolism of Jane's wedding veil earlier in the novel. This depiction is concordant with Huntington disease, where behavioral changes may predominate early while cognitive features may be subtle, preceding motor involvement and frank dementia by over 10 years.^{5,6}

Also under his second tenet, Huntington describes improper sexual behavior, relating instances of "married men, whose wives are living, and who are constantly making love to some young lady, not seeming to be aware that there is any impropriety." He reports male patients who "never let an opportunity to flirt with a girl go past unimproved." In *Jane Eyre*, the tone and description of Mason's behavior is restricted, characteristic of the Victorian era. Mason's language is compared to a

"professed harlot" and there are allusions to "infamous conduct" by Mason leading to disgrace of the Rochester family.

Huntington reported on the severity of psychiatric involvement and the increased risk for suicide: "that form of insanity which leads to suicide, is marked." He described "several instances of suicide of people suffering from this form of chorea, or who belonged to families in which the disease existed." Huntington's observation of increased suicide in preclinical stages has been confirmed. Notably, the highest risk of suicide is in the early stages of disease where patients exhibit prominent behavioral features with subtle neurologic signs.⁷ Mason appears to have committed suicide. The series of events commences when Mason "set fire first to the hangings of the room next her own" then Jane's unoccupied room. Mason then went to the roof where she "was standing, waving her arms" until Rochester attempted to rescue her then "she yelled and gave a spring, and the next minute she lay smashed on the pavement." This suggests she committed suicide after initiating arson of the home, and by rejecting Rochester's help to save her from the fire.

Its manifesting itself as a grave disease only in adult life. While Huntington disease is now recognized to have a wide spectrum of age onset, the seminal description was of an adult-onset disorder. Huntington eloquently described inexorable progression: "when once it begins, it clings to the bitter end." Based on Rochester's descriptions of Mason from their courtship, the onset of her illness was in her late twenties and progressed in her thirties as "her character ripened and developed with frightful rapidity." This captures the gravity of the illness, and was severe enough to require a personal caregiver. By her early forties, Mason's premature death is suggestive of suicide.

Abnormal movements

Huntington's description of familial chorea was of movements, "which gradually increase in violence and variety." In Brontë's work, Mason is portrayed with exaggerated movements in various scenes. Mason was depicted as a "figure [moving] backwards and forwards... whether beast of human being...[i]t groveled...snatched and growled like some strange wild animal." In the scene where Mason was revealed to Jane, Mason lunged at Rochester, was subdued, and bound to a chair to control her movements. Jane described "the operation... amidst the fiercest yells, and most convulsive plunges."

Arguments against the notion that Bertha Mason had Huntington disease

The classic triad of Huntington disease is of behavioral, cognitive, and motor involvement with chorea. Mason's progressive illness was predominated by behavioral disturbances; however, the cognitive features and motor features are less well defined. It is suggested that Mason lacked frank dementia at the time of her death. A major issue is the absence of chorea in the depiction of Mason's movements. Brontë described Mason as having "movements of the wild beast." While this complies with Huntington's original description of "violence," it is opposed to classic choreiform movements in Huntington disease.

Additionally, Mason's movements appear to be voluntary rather than involuntary. One possibility is that this represents psychomotor agitation as a manifestation of her psychiatric state, and that fulminant chorea is not yet evident. A notable feature arguing against Huntington disease is evidenced by descriptions of her preserved motor control up to the year before her death. She was able to creep down stairways without detection, she held Jane's wedding veil then "tore it in two and trampled on it" suggesting retained fine motor movements, coordination, and strength. While Mason's character had similarities to the tenets set forth in Huntington's work, these discrepancies necessitate consideration of differential diagnoses.

Other diagnostic considerations

Bertha Mason had a familial, progressive, primarily psychiatric disease with violent movements that culminated in premature death. Other diagnoses to consider include Huntington disease-like illnesses.⁸ Huntington disease-like 2 (HDL-2) is inherited in an autosomal dominant manner with similar cognitive, psychiatric, and motor features, and chorea may be minimal.⁹ Unlike Huntington disease, maternal anticipation occurs in HDL-2, which is relevant concerning Mason's mother's psychiatric disease.¹⁰ Mason's mother was of Creole heritage and HDL-2 is much more common in families of African descent.¹¹ Other Huntington disease mimickers with familial psychiatric and cognitive features include dentatorubropallidus atrophy and spinocerebellar ataxia-17; however, the description of Mason's movements does not favor a diagnosis of ataxia.⁸ While the family history of three affected generations suggests a monogenetic autosomal dominant disorder, Mason may have had a primary psychiatric disorder such as bipolar affective disorder or schizophrenia, which frequently have positive family histories. Earlier in the novel, Mason is described as having "lucid intervals of days to weeks." Taken with her "outbreaks of violent and unreasonable temper," this could indicate hypomanic and manic periods of bipolar disorder.¹² At other times she is depicted with an inappropriate affect or emotion: "curious laugh-distinct, formal, mirthless," which may indicate a schizoaffective disorder or schizophrenia.¹³ The fluctuating course also brings into question metabolic disorders such as porphyria or Graves' disease with thyrotoxicosis as she was depicted with "red eyes" or "bloodshot eyes"; however, the lack of other constitutional signs makes these disorders less likely.

Brontë and medicine

Brontë was acquainted with the medical writing of her day and medical references are noted in her work. Her father, Reverend Patrick Brontë, acquired Dr. Thomas John Graham's *Modern Domestic Medicine* in 1831 and copiously annotated it, to the extent that it was deemed the "secular Bible" of the Brontë household.¹⁴ In addition to featuring a typhus epidemic and tuberculosis, Brontë includes neurologic disease in *Jane Eyre* with Jane's aunt suffering a stroke manifested by hemiplegia and aphasia. There is speculation on whether Brontë based her characterization of Mason on a living person. Brontë lived much of her life in Haworth, West Yorkshire,

England, while the origins of the New England kindred with Huntington disease were traced to a separate region of England, Suffolk by Percy Vessie.¹⁵ The New England population of patients that Huntington cared for is thought to have emigrated from England in the 1630s, initially settling in Salem, Massachusetts.¹⁶ It is unclear whether Brontë would have encountered someone with Huntington disease prior to her writing of *Jane Eyre*.

Victorian neuropsychiatric disease

The depiction of Bertha Mason as the "mad woman in the attic" has been contested by literary critics as both inhumane and enlightening. While Brontë's treatment of Mason has been abhorred by some critics, others note the influence of this portrayal in revealing the treatment of neuropsychiatric disease in Victorian England.¹⁷ The Rochester family hid Mason away from society to protect their name, which was likely a common attitude toward neuropsychiatric disease in Victorian England. Brontë's recognition of this treatment of Mason was illustrated by Jane's rebuke of Rochester; she reprimands him for being "inexorable for that unfortunate lady: you speak of her with hate—with vindictive antipathy. It is cruel—she cannot help being mad." Rochester entreats that by locking Mason on the top floor, he was "shelter[ing] her degradation with secrecy" and keeping her in "safety and comfort." While the motives may have been selfish, there is truth to his statement as Victorian asylums were recognized as "prisons or dungeons" as shown by an 1841 report by Parliament. The publication of *Jane Eyre* occurred around the time of increased recognition of the treatment of patients with neuropsychiatric diseases in asylums, with the goal of transitioning the asylums to "modern establishments" to provide patient care.¹⁸ Brontë's account of Mason brought the issue of the humane treatment of patients with mental illness into broader view. This insight remains important today as patients with Huntington disease and their families have a long history of stigmatization and prejudicial representation.¹⁹

Conclusion

A quarter of a century before the reading of Huntington's essay "On chorea," Brontë depicted Bertha Mason in *Jane Eyre*, a woman suffering from a familial disorder with prominent behavioral and cognitive decline with violent movements, likely culminating in suicide. This neuropsychiatric disease had striking similarities to the cases of familial chorea described by Huntington. Mason's fictional character has continually served to capture the attention of readers and spark discussion over her possible diagnosis, as well as the treatment of patients with neuropsychiatric disease such as Huntington disease.²⁰

References

1. Huntington G. On chorea. *Med Surg Rep* 1872;26:317–321.
2. Dunglison R. *Practice of medicine*. 1 ed. Philadelphia: Lee and Blanchard, 1843.
3. Okun MS. Huntington's disease: What we learned from the original essay. *Neurologist* 2003;9:175–179.

4. Brontë C. *Jane Eyre*. New York: Norton & Co., 2001.
5. Duff K, Paulsen JS, Beglinger LJ, Langbehn DR, Stout JC. Psychiatric symptoms in Huntington's disease before diagnosis: The predict-HD study. *Biol Psychiatry* 2007;62:1341–1346, doi: <http://dx.doi.org/10.1016/j.biopsych.2006.11.034>.
6. Paulsen JS, Langbehn DR, Stout JC, et al. Detection of Huntington's disease decades before diagnosis: The Predict-HD study. *J Neurol Neurosurg Psychiatry* 2008;79:874–880, doi: <http://dx.doi.org/10.1136/jnnp.2007.128728>.
7. Paulsen JS, Hoth KF, Nehl C, Stierman L, The Huntington Study Group. Critical periods of suicide risk in Huntington's disease. *Am J Psychiatry* 2005;162:725–731, doi: <http://dx.doi.org/10.1176/appi.ajp.162.4.725>.
8. Schneider SA, Walker RH, Bhatia KP. The Huntington's disease-like syndromes: What to consider in patients with a negative Huntington's disease gene test. *Nat Clin Pract Neurol* 2007;3:517–525, doi: <http://dx.doi.org/10.1038/npcneuro0606>.
9. Greenstein PE, Vonsattel JP, Margolis RL, Joseph JT. Huntington's disease like-2 neuropathology. *Mov Disord* 2007;22:1416–1423, doi: <http://dx.doi.org/10.1002/mds.21417>.
10. Margolis RL, Holmes SE, Rosenblatt A, et al. Huntington's disease-like 2 (HDL2) in North America and Japan. *Ann Neurol* 2004;56:670–674, doi: <http://dx.doi.org/10.1002/ana.20248>.
11. Margolis RL, Rudnicki DD, Holmes SE. Huntington's disease like-2: Review and update. *Acta Neurol Taiwan* 2005;14:1–8.
12. Hilty DM, Leamon MH, Lim RF, Kelly RH, Hales RE. A review of bipolar disorder in adults. *Psychiatry (Edgmont)* 2006;3:43–55.
13. Tandon R, Gaebel W, Barch DM, et al. Definition and description of schizophrenia in the DSM-5. *Schizophr Res* 2013;150:3–10, doi: <http://dx.doi.org/10.1016/j.schres.2013.05.028>.
14. Shuttleworth S. *Charlotte Brontë and Victorian psychology*. Cambridge: Cambridge University Press, 1996.
15. Vessie P. On the transmission of Huntington's chorea for 300 years—The Bures family group. *Nervous Mental Dis* 1932;76:553–573.
16. Critchley M. The history of Huntington's chorea. *Psychol Med* 1984;14:725–727.
17. Iwama M. Bertha Mason's madness in a contemporary context. *Victorian Web*, 2003, <http://www.victorianweb.org/authors/bronte/cbronte/iwama8.html>.
18. Report of the Metropolitan Commissioners in Lunacy to the Lord Chancellor. Presented to both houses of parliament by command of Her Majesty. *Westminster Rev* 1845;43:162–192.
19. Wexler A. Stigma, history, and Huntington's disease. *Lancet* 2010;376:18–19.
20. Voss H. The representation of movement disorders in fictional literature. *J Neurol Neurosurg Psychiatry* 2012;83:994–999.