

# Migraine and the Presidency: Clinical Lessons from History?

History reveals some interesting facts about migraine, perceptions of chronic headaches, and the impact of migraine on the power to lead.

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**T**he health of presidents, past and present, is of intense public interest. As headache specialists, we are especially interested in the migraines of presidents. Relatively recently, it was revealed that Republican candidate for the presidential nomination Michele Bachmann has a history of migraines. This information, widely reported in the popular press, was accompanied by speculation that Ms. Bachmann's headaches would interfere with her ability to serve as president. These assertions reflect popular misconceptions about migraine and its potentially debilitating effects on individuals. While it is certainly true that migraine can have a significant negative impact on quality of life and functioning, it is also true that a great many migraineurs are vital and productive contributors to society. In fact, there is a good deal of evidence that several past presidents of the US had migraines. This reality may provide an opportunity for neurologists and the general public to better appreciate the diverse experiences of migraineurs.

## The Personal Impact of Migraine

Migraine can be a debilitating disorder even with the best management. For example, up to 40 percent of all attacks and 25 percent of all patients do not respond to any of the triptans.<sup>1</sup> About 50 percent of patients respond to a given first line preventive agent for

episodic migraine and about 40 percent respond for chronic migraine, with about 20 percent of patients not able to tolerate each preventive medication.

Migraines frequently cause disability.<sup>2</sup> Most migraineurs report at least occasionally experiencing severe impairment or the need for bed rest during migraine attacks with only 7.2 percent reporting no history of attack-related impairment. In one investigation, over a three-month period, about 35.1 percent of the migraineurs studied had at least one day of restricted activity due to headache with 25 percent missing at least one day of work or school.<sup>3</sup> In a survey of a large sample of migraineurs, the mean lost productive time per week was 1.8 hours with 77 percent of that time explained by reduced performance or presenteeism.<sup>4</sup> Canadian investigators reported that 90 percent of people with migraine reported postponing their household work because of headaches, 30 percent had canceled family and social activities during their last migraine attack, and two-thirds feared letting others down because of their headaches.<sup>5</sup> Migraine costs American employers \$13 billion dollars per year.<sup>6</sup>

## Clinical History

United States congresswoman and Republican presidential candidate Michele Bachmann, age 55, has a history of migraines that was first disclosed in a web-

site article on July 18, 2011.<sup>7</sup> She was reported as having had severe migraines an average of once per week which could incapacitate her for days at a time and which had required urgent care visits as well as hospitalization on at least three occasions. An advisor reportedly stated that the headaches were so intense that she kept at close hand a variety of medications intended for both migraine prevention and acute treatment. For example, on May 13, 2010, during the course of a six-hour flight to Los Angeles for a series of political and fundraising events, she reportedly became so ill consequent to migraine that she was taken to an urgent care center near LAX and subsequently struggled with pain throughout that weekend. According to an anonymous advisor, “When she gets ‘em, frankly, she can’t function at all” and “It’s a careful choice of words I used: ‘incapacity.’” The former aide asks, “As president, when she’s in crisis management mode, is she going to have the physical ability to withstand the most difficult challenges facing America?” The article also stated that Ms. Bachmann, “has implausibly blamed the headaches on uncomfortable high-heeled shoes.”

On July 19, 2011, Representative Bachmann issued a statement that reads in part: “Like nearly 30 million other Americans, I experience migraines that are easily controlled with medication...Since entering the campaign, I have maintained a full schedule...I have prescription medication that I take whenever symptoms arise and they keep the migraines under control. Let me be abundantly clear: my ability to function effectively has never been impeded by migraines and will not affect my ability to serve as Commander in Chief. The many questions I have received on this subject have allowed me to discuss this important condition that impacts individuals in nearly one in four households.”<sup>8</sup>

On July 20, 2011, Ms. Bachmann released a letter from Dr. Brian Monahan, attending physician of the Congress of the United States, stating the following: “You have a well-established diagnosis of migraine headaches with aura for which you have had an extensive evaluation by both my office and by a board-certified consulting neurologist. Your evaluation has entailed detailed labwork and brain scans all of which

were normal. Your migraines occur infrequently and have known trigger factors of which you are aware and know how to avoid. When you do have a migraine, you are able to control it well with as-needed sumatriptan and odansetron. It has not been necessary for you to take daily scheduled medications to manage this condition. You have not needed medical attention from me regarding your migraines with the use of the above mentioned commonly used therapies.”<sup>9</sup>

Her son, Dr. Lucas Bachmann, a medical resident, stated, “She would not in any respect meet the definition for not having capacity in one of these episodes.”<sup>10</sup> He added that Ms. Bachmann did notice a correlation between the headaches and days when she is wearing heels but a correlation does not necessarily equal causation.

Despite the insinuations to the contrary, history shows that migraineurs are medically fit to be President of the United States.

### **Historical Perspective**

**Jefferson.** Thomas Jefferson, third president, had severe occasional headaches that he called “inveterate headaches”<sup>11</sup>—the first around the age of 20—usually triggered by stress lasting days to weeks.<sup>12</sup> Cohen and Rolak found this consistent with probable migraine.<sup>13</sup> An incomplete description of Jefferson’s headaches is available, but it is known that his headaches could be severe, were aggravated by exercise, and accompanied by light sensitivity. See the sidebar for more on Jefferson’s headaches and the concept of “episodic daily migraine.”

**Adams.** The author can find one reference that John Adams, second president, had migraines also while in Paris in the late 1770s: “With only his Puritan conscience for company in his hotel room, he developed severe migraines....”<sup>23</sup>

**Lincoln.** Although the author can find few details, Abraham Lincoln, the sixteenth president, suffered from migraines. While president and weighing recommendations from his cabinet on whether to reinforce Fort Sumter, “The strain under which Lincoln labored in arriving at this decision was immense. All the troubles and anxieties of his life...did not equal those he felt in these tense days. The pressure was so great that

Mary Lincoln [his wife] reported that he 'kneeled over' and had to be put to bed with one of his rare migraine headaches.<sup>24,25</sup> Lincoln also suffered from recurring depression from young adulthood.<sup>26</sup>

**Grant.** Ulysses S. Grant, eighteenth president, had a history of recurrent migraines from youth which he complained were provoked or intensified by music.<sup>27</sup> Some headaches were treated with chloroform.<sup>28</sup> He described one of his attacks that had occurred on April 8, 1865, when he was 42 and in the final days of the Civil War: "On the 8th I had followed the Army of the Potomac in rear of Lee. I was suffering very severely with a sick headache, and stopped at a farm house on the road some distance to the rear of the main body of the army. I spent the night in bathing my feet in hot water and mustard, and putting mustard plasters on my wrists and the back part of my neck, hoping to be cured by morning."<sup>29</sup> The headache was still present the next morning when a messenger arrived with a letter from General Robert E. Lee (also a migraineur<sup>30</sup>) who at last was requesting "an interview in accordance with the offer [the South laying down their Arms] contained in your letter." As Grant recorded in his journal, "When the officer reached me, I was still suffering from the sick headache; but the instant I saw the contents of the note I was cured."<sup>31</sup>

**Wilson.** Over a span of eight of his 50 adult years, Woodrow Wilson, 28th president, suffered at least 14 periods in which "nervousness, dyspepsia, and headaches became so severe as to interfere seriously with his work." Shortly after arriving at Johns Hopkins to start his doctorate in political science in 1883, he wrote, "I over-taxed my eyes yesterday and am today suffered with a dull ache through my head and with throbbing orbs that refuse all use."<sup>32</sup> In 1886, just after completing his doctorate, he corresponded, "I have a rattling headache."<sup>33</sup> While president of Princeton, he had pounding headaches. Shortly after becoming president in 1913, he started playing golf every day but Sunday, prescribed by his physician (and close friend, Dr. Grayson, who was usually his partner) "as a necessary form of exercise for Wilson to battle the anguish of stomach cramps and migraines headaches related to a heart condition that was aggravated by stress."<sup>34</sup> He played at least 1,200 rounds as

president, perhaps as many as 1,600, with an average score of 115.

While on a speaking tour as president prior to his stroke in 1919, he was reported to have daily violent headaches,<sup>35</sup> which were so bad that he could "hardly see."<sup>36</sup> There is not sufficient information available to know whether these headaches might have been migraines or unrelated and perhaps due to uncontrolled hypertension. He had a history of hypertension, small strokes in 1896 and 1906, and chronic elevation of his blood pressure while president.<sup>37</sup>

### Modern Presidents and Undiagnosed Migraine

**Truman.** About 50 percent of migraineurs currently (perhaps a larger percentage in the past) have undiagnosed migraines which may also have been the case of the next presidents we consider. Might Harry S Truman, thirty-third president, have had migraines? "Upon becoming presiding judge of the county court, Harry began suffering sinus headaches. [Most people with self-diagnosed "sinus headaches"<sup>38</sup> and many diagnosed by non-neurologist physicians have migraines. Also see Kennedy's visit to an ENT physician below.] Relief came when he packed his bags and went on another Old Trails Road Association trip" at a remote lakeside cottage. In a letter to Bess in 1927, he wrote, "You don't know how great a relief it is to be loose from that [court] responsibility. I'm not going to think of anyone but my baby [Margaret] and come home without a headache."<sup>39</sup> He later wrote, "I am having a fine time and no expense and I haven't had a headache since I arrived." He is documented as having headaches again as senator during a stressful period when Roosevelt was trying to pack the Supreme Court.<sup>40</sup> (If you have further interest, there may be more information about his headaches available in his Army medical records 1917-1955<sup>41,42</sup> available at the Harry S Truman Library and Museum in Independence, MO.)

**Eisenhower.** The author found one reference concerning Dwight D. Eisenhower, thirty-fourth president, and headache as follows: "He suffered, too, [early 1930's] from a succession of ailments that were almost certainly brought on by stress—mysterious pains in the back and stomach, diarrhea, excruciating

### Clinical Report: Thomas Jefferson and Episodic Daily Migraine?

Jefferson's documented episodes of prolonged headache associated with stress include the following: the first after a failed courtship; the second after the death of his mother and just before he was assigned to author the first draft of the Declaration of Independence; the third when he was recalled from Paris and while coping with other personal issues; the fourth while secretary of state and involved in the dispute over the location of the nation's new national capital; and the fifth while he was clashing personally and politically with Alexander Hamilton.

Jefferson's descriptions of his own headaches in letters and account books are incomplete but give us some insight into his suffering and impairment.<sup>14</sup> On March 20, 1764: "I will endeavor to answer it as circumstantially as the hour of the night, and a violent head ach, with which I have been afflicted these two days..My head achs, my candle is just going out..."<sup>15</sup> On May 27, 1790: "A periodical headache has put it out of my power for near a month to attend to any busines."<sup>16</sup> On June 23, 1791: "I am in hopes the relaxation it gave me from business, has freed me from the almost constant headach with which I had been persecuted thro the whole winter and spring."<sup>17</sup> In a letter dated March 20, 1807, while he was president: "Indeed, I have but a little moment in the morning in which I can either read, write, or think; being obliged to be shut up in a dark room from early in the forenoon till night, with a periodical headach."<sup>18</sup> In 1819, at the age of 75, he wrote, "A periodical headache has afflicted me occasionally, once, perhaps, in six or eight years, for two or three weeks at a time, which seems now to have left me."

**Episodic daily migraine.** For migraineurs who experience only (or primarily) long duration headaches, the author has coined the term "episodic daily migraine." This migraine variant may be expressed by otherwise typical migrainous attacks that last for days, weeks, or even months...separated by headache-free intervals. Such cases previously have been reported by Medina and Diamond as "cyclical migraine." Larger case series would be helpful to better define the spectrum of this presentation and the ranges of duration. Robbins et al. have reported 7.5 percent of patients with new daily persisting headache with a relapsing-remitting type and migraine features. Do these patients have episodic daily migraine? How might one distinguish the two?

headaches. Physical examinations showed nothing seriously wrong."<sup>43</sup>

**Kennedy.** Several sources quote John F. Kennedy,

thirty-fifth president, as having made a ribald comment about his migraine.<sup>44</sup> Although this may have been a joke, another source states, "President Kennedy didn't like riding in open motorcades because the bright sunlight triggered his migraines."<sup>45</sup>

In a journalist's review of his medical records, the only mention of headaches was in 1952 when he saw an ENT physician for headaches when he was running for senator.<sup>46</sup> This journalist's book only states, "After the diagnosis of his Addison's disease in September 1947, he continued to struggle with medical concerns. Over the next six years, headaches...plagued him."<sup>47</sup> There might be more information about his headaches in the medical records of White House physician, Dr. Janet Travell [myofascial pain pioneer<sup>48</sup>] from 1955-1963, who gave him procaine injections in his back. They are available for review by physicians by request at the John F. Kennedy Presidential Library and Museum in Boston (Tom Putnam, administrator, personal communication, 7/29/11).

If JFK had migraine, perhaps one migraineur admires another. At a dinner honoring 49 Nobel Laureates on April 29, 1962, Kennedy said, "I think this is the most extraordinary collection of talent, of human knowledge, that has ever been gathered together at the White House, with the possible exception of when Thomas Jefferson dined alone."<sup>49</sup>

**More recent presidents.** I can find no evidence that more recent presidents have had migraines. For example, one source cites Richard M. Nixon, 37th president, as stating, "He also told the physician [White House physician Dr. Tkach] that he had never had a headache. He seemed to think headaches were imaginary—excuses for weak men."<sup>50</sup> Perhaps they were individuals cut from the same cloth as my brilliant and inspiring (but demanding) mentor and departmental chairman, Stanley H. Appel, MD. I asked him if he ever had migraines, and he replied, "I don't have migraines, I give migraines." It is also possible that a past or future president may have a diagnosis of migraine and not wish to reveal the diagnosis because of concern that the public may misinterpret the significance or interpret the headache as a sign of weakness.

## Migraine and the Presidency

### Survey of the Southern Headache Society on Migraine and the Presidency

In order to obtain opinions on migraine and the presidency from a group of migraine specialists, a survey was emailed to the 164 persons on the listserv of the Southern Headache Society on July 23, 2011 with three follow-up notices. There were 56 respondents with the following demographics: average age, 53 years; average years in practice, 22; 76 percent males; and 79 percent neurologists. Consistent with a prior national survey of neurologists and headache specialists,<sup>66</sup> 69 percent reported a personal lifetime history of migraine. Only 15.6 percent reported ever missing work due to a migraine attack suggesting a higher level of presenteeism than the general population.<sup>59</sup> Results are provided in the table.

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Rating Average
1. A person with episodic migraine without aura would be able to fully carry out the duties and responsibilities of President.	0%	1.9%	3.8%	32.1%	62.3%	4.6
2. A person with episodic migraine with aura would be able to fully carry out the duties and responsibilities of President.	0%	1.8%	9.1%	30.9%	58.2%	4.5
3. A person with chronic migraine would be able to fully carry out the duties and responsibilities of President.	3.6%	27.3%	29.1%	21.8%	18.2%	3.2
4. A person with severe migraine attacks requiring bedrest and intravenous medication would be able to fully carry out the duties and responsibilities of President.	9.3%	31.5%	16.7%	31.5%	11.1%	3.0
5. A person with episodic migraine attacks which resolve within several hours with a triptan would be able to fully carry out the duties and responsibilities of President.	1.9%	0%	5.7%	35.8%	56.5%	4.5
6. The typical duties and responsibilities of President of the United States (such as stress, lack of sleep, frequent airplane travel, frequent change of time zones, flashing camera lights, and spotlights) would likely be triggers for most migraineurs.	0%	3.7%	5.6%	57.4%	33.3%	4.2
7. A migraineur on preventive medication would be able to fully carry out the duties and responsibilities of President.	0%	0%	11.5%	38.5%	50%	4.4
8. A migraineur on preventive and/or acute medication might have some side effects which might interfere with their ability to fully carry out the duties and responsibilities of President.	3.7%	18.5%	18.5%	50%	9.3%	3.4
9. If the presidential candidate were a male with migraine, there would be less public discussion about his fitness to serve as compared to a female candidate.	5.7%	17.0%	5.7%	37.7%	34.0%	3.8

**Presidential spouses.** Abigail Adams, wife of John and mother of sixth president John Quincy Adams,<sup>51</sup>

Mary Lincoln,<sup>52</sup> Mamie Eisenhower,<sup>53-55</sup> and Jacqueline Kennedy<sup>56,57</sup> may all have had migraines. The wife of

2008 Republican presidential nominee, US Senator John McCain, Cindy McCain, has bravely come publicly forward to divulge her history of chronic migraine with aura and has become a migraine advocate.<sup>58</sup> She has described how exposure to bright lights was for her a migraine trigger that caused her to frequently wear sunglasses while her husband was running for president.<sup>59</sup> Migraine is co-morbid with many conditions including depression and bipolar disorder,<sup>60</sup> a fact supported by the examples of Abraham and Mary Todd Lincoln.

**Most migraineurs function well  
(...but consider “presidential triggers”)**

Most migraineurs manage well in their lives the vast majority of the time. Candidates for presidents and presidents usually are at an age when the prevalence and clinical activity of migraine are decreasing. In addition, presidential candidates may “self-select,” such that those with physical disorders likely to be aggravated by the rigors of public life choose to avoid seeking high office or are unable to get elected. A candidate or president are constantly exposed to a variety of common migraine triggers which are reported by the following percentages of migraineurs: stress, 89 percent; not eating, 57 percent; weather, 53 percent; physical exhaustion or traveling, 53 percent;<sup>61</sup> sleep disturbance, 50 percent; perfume or odor, 44 percent; and lights (such as camera and spotlights), 38 percent.<sup>62</sup> The physical and emotional stress is obviously extraordinary and the travel can be grueling even if you have your own plane, don’t have to go through security or customs, don’t have to check in and out of hotel rooms, call for cabs or even pack your own bags.

**Remaining questions.** Section 3 of the 25th Amendment of the US Constitution (passed by Congress in 1965 and ratified in 1967) provides the means for a disabled president voluntarily to transfer the powers of his office to the Vice-President (to serve as Acting President), and section 4 permits the Vice-President and a majority of the President’s Cabinet to transfer powers to the Vice-President if they deem the President disabled and unable to exercise the powers of government. Would either ever be invoked with an ill migraineur president?

Consider just a few of the various scenarios we encounter in everyday headache medicine: chronic migraine which does not respond to preventive and symptomatic medications; migraine status with intractable nausea and vomiting; migraine with diarrhea; basilar type migraine; and migraine with a dysphasic aura (which accounts for about 20 percent of all auras). The reader may recall the frenzy of media attention involving the television reporter, Serene Branson, an established migraineur with no prior history of aura who became dysphasic on live television at the 2011 Grammy’s. She was perceived by many of the public as having suffered a stroke (reference includes a recounting and video of the event).<sup>63</sup> What if during a national emergency the president suffered a stress-induced migraine with aura and became dysphasic?<sup>64</sup>

It’s up to the voters to decide whether a candidate is qualified in all aspects to fulfill the duties and responsibilities of president. The public should expect candidates for the presidency to be forthcoming about any relevant health issues as their right to privacy is forfeit in this area as some others. It seems safe to state that only a small percentage of those actively afflicted with migraine would be unsuited to serve as president on that basis alone.

Coverage of the Bachmann/migraine story focused primarily on the political aspects of the issue. Of greater importance to the public (and public health) is the need for more basic research involving migraine and for more effective therapy. The \$13 million per year in research funding provided by the National Institutes of Health<sup>65</sup> is inadequate to the task of addressing this disabling and costly disorder that so profoundly affects the lives of so many Americans including presidential candidates, presidents, and first ladies. ■

*This article has been adapted from an article that originally appeared in **Headache** (Migraine and the Presidency; 2011;51:1431-1439), accessible online at [www.headachejournal.org/](http://www.headachejournal.org/).*

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## Migraine and the Presidency

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