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# Neurological literature: Sherlock Holmes and Neurology

Much has been written and committed to film, both motion picture and television, on the subject of Sherlock Holmes and it is not my intention to weary the reader with a further long exposition on Holmesian methods of deduction (recently adduced to the service of evidence-based medicine<sup>1</sup>), but merely to point out a few possible encounters of the great man with subjects of neurological interest as attested to in the canon.<sup>2</sup> Of course, some of these may reflect upon the medical experiences of his creator, Dr Arthur Conan Doyle (1869-1930), or his mentor and the so-called forerunner of Sherlock Holmes, Dr Joseph Bell (1837-1911),<sup>3</sup> or even possibly of the writer of the stories, Dr John H. Watson, MD, a veteran of Afghanistan who sometimes observes people with a "surgical eye" (1041). Some Holmesian examples of neurological illness have previously been documented by Westmoreland & Key.<sup>4</sup>

### Headache and facial pain

Conan Doyle suffered from neuralgia from boyhood, apparently so much so that the editors of his collected letters omit examples for "fear of exhausting the reader's patience".<sup>5</sup> In a fictionalised account of parts of Conan Doyle's life, Jean Leckie, the woman who was to become his second wife, is said to suffer from migraines.<sup>6</sup> It might therefore be anticipated that headache and/or neuralgia would feature in Holmes's experiences, but Westmoreland & Key make no mention of headache, unless it be adumbrated by their category of "simulated condition".

In fact, only four references to headache have been noted (269,463,839,1115), two of which at least are certainly spurious, being used as excuses: for example, in *The Adventure of the Speckled Band*, Holmes advises Miss Stoner to confine herself to her room on the pretence of a headache in order to facilitate giving a nocturnal signal which is material to the apprehension of the criminal (269). McMurdo in *The Valley of Fear* develops headache as a consequence of excessive drink (839).

### Altered states of consciousness

There are plenty of examples of "brain fever" and/or delirium. An episode of the former is central to the plot of *The Naval Treaty*, and an episode also occurs in *The Adventure of the Cardboard Box*. Delirium is mentioned on several occasions (e.g. 56,759,797), rather than the once alluded to by Westmoreland & Key,<sup>4</sup> often in the context of fever. Most celebratedly, Holmes himself



Sherlock Holmes by Sidney Paget (1860-1908).

feigns delirium, sufficient to deceive even the medical gaze of Watson, to ensnare the criminal in *The Adventure of the Dying Detective* (935). Syncopal episodes are also encountered (929), for example, two in quick succession in *The Adventure of the Devil's Foot*:

...the doctor was as white as a sheet. Indeed, he fell into a chair in a sort of faint...(959)  
She had fainted with horror upon entering the room...and seeing that dreadful company around the table (959).

Both these phenomena are occasioned by seeing two brothers, "the senses stricken clean out of them" (957), and their dead sister. The brothers are described as "demented" (957), apparently acutely, necessitating transfer to an asylum (959).

A toxic cause is eventually found responsible for all these events.

### Movement disorders

In *The Sign of Four*, Thaddeus Sholto is reported thus:

He writhed his hands together as he stood, and his features were in a perpetual jerk – now smiling, now scowling, but never for an instance in repose (100).  
Mr Thaddeus Sholto ... sat twitching on his luxurious settee (105).

In addition to these apparently involuntary movements, Sholto has a peculiar physiognomy: he is a "small man with a very high head, a bristle of red hair all round the fringe of it, and a bald shining scalp...In spite of his obtrusive baldness he gave the impression of youth" (100).

It would be interesting to know if his identical twin brother, Bartholomew, had a similar movement disorder, but he is only encountered in

death: his "features were set...in a horrible smile, a fixed and unnatural grin" (109). Holmes identifies this as an "extreme contraction, far exceeding the usual rigor mortis" and quizzes Watson as to what "this Hippocratic smile, or risus sardonicus" might suggest about the cause of death.

In *The Greek Interpreter*, a character called Wilson Kemp has involuntary movements:

"...his lips and eyelids were continually twitching like a man with St. Vitus's dance. I could not help thinking that his strange, catchy little laugh was also a symptom of some nervous malady" (441).

As with Sholto, I leave it to movement disorders experts to diagnose the case!

### Catalepsy

Perhaps the most celebrated neurological episode in the Holmes canon occurs in *The Resident Patient*, which features a "Russian Nobleman" reported to have catalepsy who visits Dr Percy Trevelyan, who has a particular interest in this condition. An attack occurs during their consultation, which Trevelyan describes thus to Holmes and Watson:

Suddenly, however, as I sat writing, he ceased to give any answer at all to my inquiries, and on my turning towards him I was shocked to see that he was sitting bolt upright in his chair, staring at me with a perfectly blank and rigid face. He was again in the grip of his mysterious malady (427).

Holmes is unimpressed, later telling Watson: "It is a very easy complaint to imitate. I have done it myself" (430).

Two very distinguished neurologists, Robin Howard and Hugh Willison, have already written a seminal paper on this topic<sup>7</sup> which renders all further comment superfluous, in which they suggest that the model for Dr Percy Trevelyan was in fact Sir William Gowers (1845-1915), one of the most famous of Queen Square neurologists.<sup>8</sup>

### Conclusion

To my reading, it seems that Conan Doyle uses neurological illness in the Sherlock Holmes stories as no more than a convenient literary device. Detailed clinical description, which one might have supposed to be at Conan Doyle's disposal based on his clinical experience, is not in evidence, precluding detailed retrospective clinical diagnosis (perhaps just as well, some might think).

As for the suggestion of Holmes *qua* neurologist,<sup>9</sup> one imagines he would be easily capable of acquiring the detailed knowledge required, but I fear that, being a man of his (Victorian) age, he wouldn't pass the first hurdle into medical school today, based on statements such as this one:

It is of the first importance not to allow your judgement to be biased by personal qualities. A client to me is a mere unit, a factor in a problem. The emotional qualities are antagonistic to clear reasoning (96). ♦

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