A Fever in Salem

A NEW INTERPRETATION OF THE NEW ENGLAND WITCH TRIALS

By Laurie Winn Carlson

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One of the reasons that the Salem witch craze has such a hold on our imagination is the detailed testimony available to us. There are several contemporary sources, including court records, of both the Salem events and of other similar happenings elsewhere in New England in the latter part of the seventeenth century. In her book *A Fever in Salem: A New Interpretation of the New England Witch Trials*, Laurie Winn Carlson draws on these events at length in the first few chapters; they make fascinating reading. She then provides some background information to give the reader a context in which to understand these trials. In the last part of the book she describes encephalitis lethargica and draws a comparison between its symptoms and those seen in the witch craze.

From about 1916 to 1927, a strange neurological pandemic ravaged the world. This was encephalitis lethargica, the "forgotten epidemic" described in Carlson's book. It has been estimated that it left about 500,000 people dead or disabled. Roughly one-third died acutely, one-third survived with chronic disability, and one third recovered. Of the survivors, many went on to develop a form of parkinsonism. This late sequela has been poignantly described in Oliver Sacks' celebrated book *Awakenings*.

Encephalitis lethargica justly bears the sobriquet 'von Economo's disease', for he gave the most complete descriptions of the disease and undertook some of the earliest attempts to understand its aetiology. While acknowledging that the symptoms could vary widely, he delineated three broad forms of the disease. First, somnolent-ophthalmoplegic: an acute, influenza-like illness, followed by somnolence and complex eye movement problems (frequently 'oculogyric crises' in which the eyes are deviated up or laterally). Often there would be further evi-

dence of focal neurological dysfunction such as unilateral limb weakness or language difficulties. Second, hyperkinetic: a few days after a rather nonspecific malaise, including headache and general bodily aches, an intense inner and outer restlessness developed, with repeated semipurposeful movements, chorea (writhing movements) and myoclonus (brief ripples of muscle activity). Visual and tactile hallucinations, and delirium might then set in. Third, amyostatic-akinetic: an acute parkinsonian syndrome, with periods of profound lack of movement, almost amounting to a catatonia-like stupor.

You may well be wondering what this recondite bit of neurology is doing on the book review pages, to which the reader (this one, at least) usually turns for light relief after reading of the tribulations of knockout mice. The main thesis of Carlson's book is that the physical and psychiatric symptoms endured by many of the inhabitants of Salem during the Witch Craze were due to encephalitis lethargica. How compelling is her evidence?

Herein for me lies the main difficulty with the work: as I have discussed, the symptoms of encephalitis lethargica are legion, and it is relatively easy to map some of the Salem symptoms onto those of each of the three main forms of the disease. Although one may accept that "twisted eyes" are oculogyric crises or that "spectral visions" are hallucinations, are the "pinches and prickings" of witches really myoclonic jerks, and is 'distraction' the same as psychosis? Similarly, her accounts of possible modes of transmission are quite speculative. Even reading the twentieth century medical literature leaves me with a feeling of confusion. For example, there are no widely agreed diagnostic criteria for encephalitis lethargica, and no positively identified pathogen. As Wilson cautioned in his neurology textbook of 1940, "There is reason to believe the encephalitis is not identical at all times and in all localities, and that it may cover states of dissimilar aetiology". How much more difficult is Carlson's exercise in 'historical' diagnosis?

Should we still be interested in these remote events, at the beginning of a new millenium? Yes, for a variety of reasons, several of which Carlson touches on: First, although the encephalitis lethargica epidemic appeared to much of the medical

world 'out of the blue', it is very likely that there had been previous epidemics, and sporadic cases are still occasionally reported. Second, although the etiological agent of encephalitis lethargica remains obscure, viral encephalitides certainly may cause potent, and sometimes long-lasting, neurological and psychiatric symptoms. Indeed, Osler felt that "almost every form of disease of the central nervous system may follow influenza"! Third, one of the pathological hallmarks of encephalitis lethargica is the neurofibrillary tangle, which is, of course, one of the villains of the piece in Alzheimer disease and other poorly understood neurodegenerative conditions.

Perhaps most importantly, Salem offers us a fascinating lesson about the interplay of disease and society. Carlson sympathetically deals with the response of the Salem community to what must have been a terrifying visitation. Initially the symptoms were considered 'medical', and the 'physicians' of the community were called upon, even though the notion that sin was linked to illness was strong. The hallucinations in particular were difficult to account for in a 'medical model', and that they might have a supernatural cause must have seemed quite believable. Even today, psychiatric symptoms are often treated as if somehow less real than 'proper' physical ones. In Salem, physics having failed, the courts were called on, as often occurs today. (I was amused by Carlson's speculation that a fear of countersuits of slander reduced the number of accusations of witchcraft in Connecticut at a similar time.)

I suspect that many readers will find her treatments of the history of psychiatry and witchcraft, and of other explanations for the Salem events, disappointingly brief and in places inaccurate. The neurologist in me bristles a little to read that Charcot, the first professor of neurology, declined to faith healing (although his standing in Parisian medical circles did indeed diminish at the end of his illustrious career). I do not think that approaches to the history of psychiatry really should be so different from those of medicine and surgery (for they too are deeply imbedded in the world view of their time). But these are not fatal flaws: *A Fever in Salem* is thought-provoking, and well worth a read.