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## psychiatry in literature

### Dorothy Wordsworth's illness

Tim Jerram

Dorothy Wordsworth (born on Christmas Day 1771), sister and collaborator of the poet William and herself a significant author, lived to the great age of 82 but the last 20 years of her life were blighted by dementia. This has been attributed to various causes, including arteriosclerotic or Alzheimer's dementia, pellagra and a depressive pseudo-dementia, but because her cognitive state fluctuated considerably, none of these is convincing. Fortunately, her condition was fully described both by her family and by literary visitors, and from her own *Journals* and the many descriptions of her by William and their literary acquaintances we know much about her premorbid state. From these we can ascribe many of her health problems to thyroid disease.

She was always an extremely energetic person, not only carrying out many household tasks but also walking enormous distances and sitting up late transcribing William's verses. She was slim but at the age of 25 she started to lose weight – some 17 lb (7.7 kg) – despite a healthy appetite and she noticeably preferred cold weather. Visitors particularly noted her as being 'all nervous energy' and as having 'abruptness and trepidation', and Coleridge famously described her as 'the perfect electrometer', most likely a reference to a fine tremor. The most significant comments were about her eyes – described as 'shooting lights', 'ardent' and 'wild and startling' – suggesting strongly that she was exophthalmic. Finally, William himself commented later that 'her throat and neck are quite filled up' – evidence that she had developed a goitre. The combination of weight loss, eye signs and goitre in a young adult constitute the syndrome of Graves' disease, the natural history of which is that if the patient does not die from exhaustion or cardiac complications the thyroid gland is gradually destroyed by the underlying autoimmune process, resulting in myxoedema many years later.

This appears to be what happened to Dorothy. By about 1810 she had regained her normal weight and then remained well. However, in the early 1830s she started to fail and by 1835 (coincidentally the year of Graves's original observation) was described as 'very poorly and growing weaker every day' and there was real concern that she was dying. She gradually became more confused, aggressive and child-like and remained in this state until her death 20 years later. Three features of her clinical presentation are typical of thyroid deficiency. First, she displayed intolerance to cold, always insisting that the 'fire be stirred'. Second, she became grossly obese. But the most outstanding feature was the variability in her mental state – at times she could recall and recite verses and only 2 years before her death was suddenly able to write a brief letter to a friend – while for much of the time she appeared to be completely demented. Such variability is inconsistent with a degenerative condition but is explicable by a metabolic illness and myxoedema is the obvious candidate.

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