LOOKING BACK

'This fascinating and fatal disease'

Jennifer Wallis investigates the history of 'general paralysis of the insane' in the Victorian asylum

On 10 January 1887, 33-year-old Patrick K. was admitted to the West Riding Asylum in Wakefield. He had been brought there having proved too unruly for the staff of Bradford workhouse – shouting, fighting the other inmates and attempting escape. His brother told the committing doctor that Patrick had contracted 'the lady's disease' two years ago and was 'very much given to drink and bad habits'. His speech was slurred and there was no reaction to the doctor tapping his knee to test his reflexes. Though he could walk in a peculiar staggering fashion, his balance was poor and he told the doctor he had recently fallen over on a number of occasions.

Despite his poor physical condition, Patrick's buoyant mental state was worthy of note: he was 'good-humoured and elated', full of grand ideas about his abilities and future plans. He told the doctors he had travelled to the East Indies where he was 'adored' by everyone, 'had a room full of gold watches to give away', and 'painted most beautiful pictures' fetching £1000 each. It was a familiar picture to the attending Medical Officer, who entered the necessary details into the casebook: 'Diagnosis: Mania, with General Paralysis. Prognosis: Unfavourable'. Just over a year later, Patrick was dead, having become steadily weaker and eventually slipping into unconsciousness.

Patrick's was a case mirrored in asylums across Britain in the late 19th century, with hundreds of people receiving the diagnosis of general paralysis of the insane (GPI). The majority of these were men in their 30s and 40s, all exhibiting one or more of the disease's telltale signs: grandiose delusions, a staggering gait, disturbed reflexes, asymmetrical pupils, tremulous voice, and muscular weakness. Their prognosis was bleak, most dying within months, weeks, or sometimes days of admission.

The fatal nature of GPI made it of particular concern to asylum superintendents, who became worried that their institutions were full of incurable cases requiring constant care. The social effects of the disease were also significant, attacking men in the prime of life whose admission to the asylum frequently left a wife and children at home. Compounding the problem was the erratic behaviour of the general paralytic, who might get themselves into financial or legal difficulties. Delusions about their vast wealth led some to squander scarce family resources on extravagant purchases – one man's wife reported he had bought 'a quantity of hats' despite their meagre income – and doctors pointed to the frequency of thefts by general paralytics who imagined that everything belonged to them.

Though GPI had been identified as a distinct disease earlier in the 1800s by a number of French writers – notably Antoine-Laurent Bayle and Jean-Étienne Esquirol – the accumulation of incurable cases in asylums, along with a feeling that insanity in general was increasing, led to renewed efforts in the last quarter of the century to determine the cause (and thus cure) of general paralysis. Among the exciting causes listed by William Julius Mickle in his extensive 1880 study *General Paralysis of the Insane* were excessive mental labour, heavy physical work, emotional strain, alcohol and sexual excess. Others suggested GPI could be brought about by a blow to the head, or as a consequence of railway accidents that injured the spine. It would be 'wine and women' however, that came to be seen as the most pertinent factors, based on the demographic characteristics of the disease.

The predominance of men among GPI patients was evident to all observers, with the military particularly susceptible, yet many writers noticed that the clergy tended to escape its ravages. On those occasions when the disease appeared in women, they were said to be prostitutes or innocent victims infected by their philandering husbands. R.S. Stewart, a Scottish alienist (as psychiatrists were then known), commented on the apparent increase of GPI during the 1880s and pointed to its prevalence in port and mining towns. This link between urban, industrial life and GPI was made by many writers, with the condition frequently characterised as 'a disease of civilisation'. General paralysis spoke to wider fears about degeneration – the sense that with progress came a risk of 'de-evolution', a regression back to man's primal nature. The conceptualisation of GPI as a 'lower form' of brain disease thus cast it as nature's rebellion against the stresses of modernity. This didn't mean that the patient entirely escaped censure. Stewart condemned the disease as 'the apotheosis of selfishness' – port and mining towns, he said, were renowned as centres of sexual and alcoholic over-indulgence.

> "General paralysis spoke to wider fears about degeneration"

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Indeed, alcohol's relationship to GPI had long been debated, as direct cause or predisposing factor. It could also complicate matters as a differential diagnosis. Henry Smith Williams, an American superintendent, emphasised the difficulty of distinguishing general paralysis from simple alcoholism: on hearing the victim's boastful plans for a fantastic new business venture or invention, his friends 'very likely think he has been drinking'. The problem of differentiating excessive drinking and GPI often raised its head behind asylum doors. John Batty Tuke, a prominent figure in 19th-century alienism (the study and treatment of mental disorders), related two cases he had witnessed that presented all the usual signs of general paralysis but had completely recovered after a short asylum stay; that their attacks had coincided with 'heavy drinking' led him to warn other doctors about the possible simulation of GPI by alcohol.

Such difficulties were undoubtedly frustrating to asylum superintendents and medical officers. Sir James Crichton-Browne, Superintendent of the West Riding Asylum, was explicit in his concern for patients like Patrick: 'Is it not possible that our professional descendants may look back with pity and censure upon the helpless attitude that we have been content to assume in the presence of general paralysis?' Yet, despite Crichton-Browne's feeling of hopelessness, late Victorian alienists were closer than they thought to the key that would unlock the mystery of GPI.

Just as Patrick's brother informed the doctor that he had once suffered the 'lady's disease', many general paralytic patients had a history of syphilitic infection. In 1857 Friedrich von Esmarch and Peter Willers Jessen suggested that syphilis was the cause of GPI, an idea that – though generally dismissed at the time – recurred throughout debates on the disease's origins. This link was complicated in contemporary eyes though, by the resistance of GPI to mercurial treatment; many interpreted this resistance as evidence against syphilitic aetiology. (Mercury was frequently used in the treatment of syphilis, administered by mouth, injection, inhalation or inunction.) German psychiatrist Emil Kraepelin (famous for his categorisation of mental disease into manic-depression or schizophrenia), on observing the inefficacy of mercurial treatment in GPI suggested it was an 'after-disease' or 'metasyphilis', the ground for which had been prepared by earlier syphilitic infection.

By the turn of the century, it was difficult to argue against a link between GPI and syphilis, even if the exact relationship between the two remained ambiguous. In 1905 the picture became somewhat clearer when Fritz Schaudinn and Erich Hoffmann in Germany identified *Spirochaeta pallida* – the bacterium that caused syphilis. A year later, also in Germany, August von Wassermann and Felix Plaut developed serological tests for syphilis, and a number of asylums reported positive test results in GPI patients. General paralysis, as many had suspected, was the outcome of untreated syphilis that finally attacked the brain and rendered its victims utterly helpless. Today, it is commonly referred to as tertiary or neurosyphilis.

In keeping with its 19th-century character though, the precise nature of GPI remained elusive, and its detection difficult. The Wassermann test was complex, relying on the technician's meticulous attention to detail, and yielded plenty of inaccurate results as a consequence. Even after 1913, when Hideyo Noguchi and Joseph Moore identified the spirochaete in a number of general paralytic brains at post-mortem, psychiatrists remained cautious and emphasised the continued importance of clinical symptoms alongside serological tests. A 1917 work, *Neurosyphilis: Modern Systematic Diagnosis and Treatment*, betrayed this sense of doubt even before the reader had got past the list of contents, offering one chapter headed 'Puzzles and Errors in the Diagnosis of Neurosyphilis'.

Despite the difficulties that continued to surround the disease, by the mid-20th century rates of neurosyphilis were dropping sharply. Earlier in the century, malarial therapy had been used to induce fever in general paralytic patients, proving effective in some cases, but it was the development of penicillin in the 1940s that sounded the death knell for the disease. For many of us, syphilis is a disease firmly located in the Victorian era; the 2011 film *House of Tolerance* depicts life in a Parisian brothel at the end of the 19th century where syphilis is as much a part of the period setting as the girl's velvet gowns and tightly-laced corsets. Though general paralysis appears to have been tamed by modern medicine, outbreaks of syphilis in recent years are cause for concern. The Health Protection Agency says that 'diagnoses of syphilis [in England] have increased substantially since 1997'; interestingly, urban areas remain especially problematic, with the HPA identifying outbreaks in Manchester and London. If these cases are left untreated, the 'fascinating and fatal' spectre of GPI may become much more than a ghost of the past, and a matter for the modern physician as well as the historian.

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