Migraine

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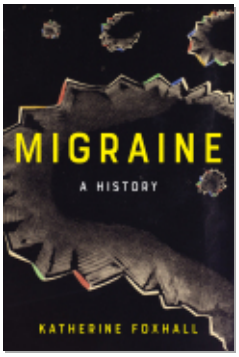

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"The Pain Was Very Much Relieved and She Slept"

Gender and Patienthood in the Nineteenth Century

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Elizabeth, the Girl Who Dropped Trays, 1895

In April 1895, Elizabeth, a sixteen-year-old servant from the small village of Burbage in rural Wiltshire, southern England, traveled eighty miles to central London. She sought the help of physicians at the National Hospital for the Paralysed and Epileptic in Queen Square. Her casenotes, which can be found in the thick bound volume of casenotes and treatment cards for prominent neurologist John Hughlings Jackson's female patients during 1895, reveal something of her first meeting with the doctors and the story she recounted about her illness. Elizabeth described how she had been experiencing St. Vitus Dance (rapid involuntary movements) on her left side, headaches and pains in her eyes, sickness, and nervousness. The headaches occurred two or three times every day and lasted for five minutes at a time. They particularly affected her left side, at the back part of the top of her head. Noise, or sometimes reading in the morning, was most liable to bring on an attack. Elizabeth had experienced spells of giddiness and twice felt weakness in her hands in the mornings. She described episodes in which she could only see the left side of her visual field, or the left half of objects. This hemiopia (or half vision, to which we will return in the following chapter) could come on suddenly or gradually, from the periphery, though she had never seen zigzags or vomited. While she said that she had never experienced any illness other than "nettle rash" (hives), she had known sickness and pains in her head ever since she could remember. These worsened when she went to school, and particularly as she learned to read. By all visible measures, Elizabeth appeared healthy. Her admission report describes "a bright intelligent healthy looking girl of 16." She was not anemic, and she showed no outward appearance of disease. Both her facial

expression and her behavior appeared "natural," and her muscles were strong and normal in size. The only thing a careful observer might note was the "constant flexion and extension of the left fingers with a rough rhythm & having an amplitude of almost half an inch."[1] For the past month, she explained, she had been unable to keep her left hand still.

Elizabeth also recounted a particular event, which the physician recorded in the margin of her hospital casenotes. One day, while carrying a tray full of things at her employer's house, the spoons on the right-hand side of the tray had suddenly disappeared from her vision. Making a dash to catch them, she "dropped the lot." We might imagine her employer's reaction to such an apparent episode of clumsiness. It is likely, for a start, that the cost of replacing the breakages would have come directly out of Elizabeth's pay.[2] Any repeat of such an incident would certainly endanger her employment, not to mention her chance of receiving a good reference to take onward. Her predicament helps explain the young woman's decision to travel to London for help. Elizabeth described her home life to the physician, underscoring further the significance of her trip in hope of a cure. She was one of eleven children. At first, she said they were all healthy, but when pressed further, she admitted that one sister had neuralgia in her face. It turned out that another sister did, too. A brother, age fifteen, had water on the brain. Her mother was alive and healthy, and Elizabeth had always been well fed and clothed, but the family was poor. "The house was unhealthy," the notes record, "very draughty and damp—moss grew up the walls. Drains are carried straight into a stream." From such a description, there is little doubt that the family would have relied heavily on Elizabeth's ability to work to bring money into the household.[3]

This chapter explores how, in the nineteenth century, physicians developed new theories about head disorders, including sick headache, bilious headache, megrim, and hemicrania. Rather than focusing on the character and location of pain (as had been common in humoral explanations), they based their ideas on the presumed cause and physiology of pain within the body, and, in so doing, increasingly made assertions about the gender and class of people subject to such conditions.[4] Women, especially exhausted mothers and working women, came to be seen as migraine's "martyrs." By the 1860s, researchers—keen to develop theories about migraine and its causes and test potential treatments—could take advantage of the availability of inpatients in specialist settings, such as the National Hospital for the Paralysed and Epileptic.

Like Elizabeth, people often traveled great distances to access care at the

National Hospital in the hope they might be treated and return to the working lives that chronic illness was making impossible. The casenotes and reports produced in institutional settings as varied as lunatic asylums and court trials reveal how ordinary people explained the onset of illness within the context of their lives, the profound effect of migraine on work and relationships, and the sometimes disturbing experiences of institutional patienthood. There is no doubt that neurological laboratories and hospital wards in places like London's National Hospital were the crucible for some of the most advanced neurological breakthroughs in modern medicine, but it is also true that these developments came at a human cost, as people in pain willingly submitted to exploratory ideas, therapeutic fashions, and experimental pharmacological mixtures.

Weak Nerves and Bad Habits

Around the turn of the nineteenth century, the terms sick headache and bilious headache began to appear more regularly in medical texts. This was a commonsense way to denote a headache accompanied by nausea, giddiness, and an aversion to food. During the first decades of the nineteenth century, physicians made clear links between sick and bilious headaches and emerging theories about the function of nerves and the brain. In 1807, influential Scottish naval physician Thomas Trotter rejected the shackles of nosological systems such as Cullen's and bundled together all the diseases commonly known as "nervous, bilious, stomach, and liver complaints, indigestion, low spirits, gout etc." into his *View of the Nervous Temperament*, in which he aimed to prevent physicians from making serious mistakes, such as diagnosing physical and mental debility as typhus (as a naval surgeon, preventing fever was one of Trotter's passions). The need for this work was urgent, he explained, as the demographics of nervous complaints had changed. "No longer confined to the better ranks in life," they were "rapidly extending to the poorer classes" in commercial, civilized society. The fashion for drinking tea, Trotter suggested, was in large measure responsible for the increasing prevalence of "nervous, bilious, spasmodic, and stomach complaints" among the "lower ranks of life." Hemicrania, he argued, was one of a number of nervous signs that revealed a predisposition to, or the existence of, nervous disorders, particularly in young women with "gouty parents."[5]

As we began to discover in the previous chapter, and as Trotter's polemic against tea further suggests, nervous symptoms such as hemicrania were increasingly being seen as the result of errors in modern lifestyles. Although I

have found no evidence that any specific link was discussed at the time, it is worth noting that in the eighteenth century, commodities such as coffee and chocolate—now so often recognized as migraine triggers—became fashionable, not just among wealthy consumers, but throughout society. Nevertheless, as we saw with John Forthergill's railing against meat pies, physicians were increasingly focused on diet's relationship to migraine more generally. Writing for an American audience in 1819, James Mease declared the stomach to be the "seat and throne" of sick headache, a disease of "high living, over-eating, late hours . . . late suppers, indolence, and relaxing habits."[6] In the 1840s, well-known London physician Theophilus Thompson described sick headache as one of many symptoms (including heartburn, sleepiness after meals, dietary intolerances, timidity, hypochondriasis, intellectual "cloudiness," or even a tendency to suicide) that could be attributed to dyspepsia, or indigestion.[7] For Thompson and his contemporaries, these symptoms were the result of modern habits, such as a sedentary life, full meals on an empty stomach, confined air and high temperatures, disturbed sleep, anxious and prolonged study, "unsatisfied ambition, and perturbed passions." The language here is important. Sick headache, and those experiencing it, were by now being consistently dismissed, ridiculed, and belittled. If only sufferers would remedy their bad habits, such pronouncements implied, they would have little need for medicines.

In 1825, fashionable English physician Caleb Hillier Parry made an important intervention when he rejected the popularly accepted view that impaired function in the liver or alimentary canal was the cause of sick headache. Instead, Parry blamed "excessive determination of blood" to the branches of the internal carotid artery supplying blood to the brain. Parry's very modern claim nevertheless employed a treatment that was centuries old. He recommended "spontaneous bleeding from the nose, or other similar remedies applied to the head."[8] A few years later, French physician Henri Labarraque argued that migraine was a disorder of the nervous system in the head, which came in several varieties, provoked by a sympathetic transmission of irritation from the eyes, stomach, or sinuses. Labarraque's treatments took careful account of the patient's constitution and the variety of their migraine. He recommended removing sources of irritation from the stomach, such as coffee and tight clothing. Persons with an irritable stomach should have a diet of white meats and fish, green vegetables, and water. Paying close attention to ancient authors, Labarraque also recommended age-old therapeutic measures, including bleeding, vomiting, and the application of a theriac plaster to the stomach.[9] By 1848, Marshall Hall proposed that compression of the veins in

the neck could obstruct the flow of venous blood away from the head and cause a whole range of "apoplectic, paralytic, epileptic, syncopal, or maniacal seizures," of which milder forms might include sick headache and "sick giddiness."[10] We can see in these examples how classical theories about animal spirits, vapors, and humors were being replaced with modern physiological explanations for a whole range of disorders, including sick headache, that were now being located primarily in the nervous system. At the same time, old ideas about treatment persisted. By the middle of the nineteenth century, biliousness, too, was being seen as an outdated concept in relation to migraine.

Martyrs

Between February and May 1854, the leading British medical journal, *The Lancet*, published a five-part essay by Patrick J. Murphy on the subject of "Headache and Its Varieties." Headache, Murphy explained, was a complaint for which medical men were "almost daily consulted." Murphy believed general confusion on the subject had led to unsatisfactory—and, in many cases, harmful—treatments. He singled out the idea of bilious headache as a particularly defective and stereotyped one. "I have never yet met a physician who could define what bilious meant," he commented, "least of all a bilious headache." He had been prompted to address the subject in response to the declaration by Dr. Graves, an American, that it would require "a good monograph" to satisfactorily classify disorders of the head.[11] Murphy proposed that classifying headaches was a relatively simple matter. There were five ordinary types of headache, of which two (anemic and congestive) were intracranial, while three (neuralgic, rheumatic, and periosteal) were extracranial. The extracranial category could be diagnosed easily by its "peculiar characters." Thus the important thing was to be able to identify the two types of intracranial headache. To do this, a physician needed to determine whether a patient's headache was caused by a *deficiency* of blood within the cranium, which would produce the most common anemic type, or by a *surplus* of blood, leading to a congestive headache.[12]

In classifying headaches this way, Murphy did not entirely reject classical conceptions of headache, but he did repackage them. He explained that anemic headache was the type commonly known by names such as cephelea, vertigo, megrim, or giddiness. Echoing William Buchan's ideas about malnourished wet nurses who suckled babies for too long, Murphy explained that anemic headache often affected "mothers in the lower classes of life," whose minds and bodies had been weakened by daily toil, disturbed sleep, and in-

sufficient nourishment, while their bodies were "hourly drained by lactation."[13] In such cases, Murphy recommended a nutritious diet, including plenty of meat to restore the nervous system. Because megrim was caused by a deficiency of blood, it was thus fundamentally different from a sick headache, caused by "congestion." Nevertheless, young women were martyrs to sick headache, too, which occurred when menstruation was either scant or stopped altogether. In this case, blood should be taken. A third kind of headache in Murphy's classification was what he called neuralgic headache, which he deemed synonymous with the hemicrania of "old authors." This, again, was "*peculiar* to females," occurring from puberty until the end of their menstrual periods, and was "undoubtedly hysterical" in origin.[14]

Murphy's classification of headaches reveals two important changes in the way physicians were thinking about migraine in the middle of the nineteenth century. First, he divided sick headache, megrim, and hemicrania into separate disorders, based on what he believed to be their different causes. Second, Murphy insisted these were all illnesses that primarily affected young women, and he clearly linked them to hysteria. During the eighteenth century, physicians had dismissed the overt gynecological assumptions that had characterized older ideas of "hysteric passions," "suffocation of the womb," or "fits of the mother" and instead explained women's apparently greater tendency to suffer from hysteria as the result of weaker and more delicate nerves. As Mark Micale argues, however, the nineteenth century witnessed the reverse, so that women's dysfunctional bodies again became the source of nervous failure.[15] Murphy's ideas illustrate how this trend fed directly into changing ideas about headaches as a problem affecting women.

Sick Headaches at the Old Bailey

At this point, the report of a criminal trial might seem a strange place to look for evidence of the history of migraine. Yet, as social historians such as David Turner have argued, legal records like these, with their forensic intrusion into the minute details of people's daily lives at home, at work, and on the streets, allow us to vividly see "the calamitous effects of disability" on personal relationships, working lives, and general well-being, not just for those who stood trial.[16] For example, on 21 December 1864, George Kempt, the subwarden at the House of Correction, Coldbathfields, went to the cell of prisoner George Phillips. The previous day, Kempt had warned Phillips that the prisoner had wrongly stacked his books on the shelf, with the "Lord's Book" on the top, rather than on the bottom of the pile, as required. When Kempt entered the cell,

he took Phillips's stool away, "as I wanted to sit down, having a sick headache —the stool was not required by the prisoner." As Kempt stooped, however, Phillips struck him a "violent blow" on the chin and inflicted two wounds on the subwarden's face with a knife.[17] George Kempt's unfortunate need to sit down at the precise moment he was supposed to be inspecting a prisoner's cell demonstrates the deeply inconvenient intrusion of the subwarden's bodily weakness into the scene, as well as the opportunity it provided for a dissatisfied prisoner to avenge a slight.

Yet we digress. The *Proceedings of the Old Bailey*—texts of trials at London's central criminal court—also provide important evidence of how changes in the language of sick headache, biliousness, female headaches, and hysteria could play out in real life. In 1844, Jane Milburn, a charwoman, appeared at the Old Bailey, having been indicted for stealing a spoon, valued at five shillings, from her master, Augustus Ironmonger. Milburn had taken the spoon to a pawnbroker, but the crest on the item had raised his suspicions, and he had handed her into custody. William Webb testified on her behalf. "I have known the prisoner twenty-three or twenty-four years," he explained. "She is not insane, but is so affected with sick headache, that at times she is not capable of knowing right from wrong."[18] She was found not guilty, because the strength of Mr. Webb's testimony seems to have convinced the court of the effect of her sick headaches on her mental capacity. Milburn's case reflects an observation made by historians of crime and punishment: courts often gave sympathetic treatment to defendants who provided strong evidence of suffering and incapacity.[19]

The vocabulary used by different parties in the case of laundress Ann Noakes in 1880 illuminates the gap that had emerged between lay and professional understandings of headache disorders. While ordinary people continued to use the older terms sick headache or bilious headache in the narratives they told of their own lives, or of the people they were called on to defend or accuse, doctors who gave professional evidence were looking at these symptoms, particularly in women, in a very different way. Noakes, a widow with four children, stood trial for the willful murder of her youngest son, William. Amy Risbridger, who had worked with Noakes for four months, described how Ann's health was in "a dreadful state," but she would not contemplate giving up work, for fear that her children would end up in the workhouse. "When she could forget her trouble," Risbridger said, "she was as nice and cheerful a woman as I ever worked with," but "she used to complain of her head very much at times—she had got a sick headache—at those times she used to say

that her trouble was too much for her to bear." Another witness, fourteen-year-old Emma Dibstall, gave a similar testimony: "[Noakes] said her head was so bad she could not bear her trouble . . . she was a very hardworking woman, standing at the tub till late at night." Risbridger remembered that Noakes had been attended by a Dr. Walters for "loss of blood, some complaint of the womb." John Walters, MD, was called to give his testimony. He explained that he had seen Noakes constantly, finding her weak, in poor health, pale, bloodless, and complaining "of great headache and restlessness at night." He told her that she needed to rest, and that the treatment would not work unless she could "lay up." The friends, families, and fellow workers who testified in defense of Noakes portrayed a hardworking woman, dealing on a daily basis with sick headache as a chronic problem that threatened not only her own mental state, but her ability to keep her family together. Noakes's long working hours seemed to contribute to the failure of her health. For Risbridger, the knowledge that Noakes was receiving treatment for "some complaint of the womb" was incidental to the way she saw her friend suffering from pain in her head and fearing for the welfare of her family. Dr. Walters saw her sick headaches as the symptom of a deeper disorder of her reproductive system, but Noakes simply could not afford to follow his order that she must rest if his treatment was to have a chance to work. Walters concluded that Noakes had been suffering from homicidal mania, and that "she would not know she was doing a guilty act" in killing her child. The court found the laundress not guilty on the grounds of insanity.[20]

The cases of Jane Milburn and Ann Noakes illustrate how, as biliousness fell out of favor during the middle of the nineteenth century, physicians became more confident in linking migraine to hysteria, epilepsy, problems in women's reproductive systems, and insanity. Although these Old Bailey records are extreme cases, they are evidence of how changing medical ideas and the language medical practitioners used to override more common understandings of illness had real effects on people's lives, particularly for women.

In 1878, F. Arnold Lees talked of the "megrim of hysterical ill-nourished women." In the 1885 Cavendish Lecture, J. S. Bristowe designated megrim as just one of "many functional diseases of the nervous system," including various forms of "insanity and epilepsy, chorea, neuralgia, and hysteria." There was no clear demarcation between these disorders, but "emotional persons, and persons of marked hysterical tendencies" were more liable than others to suffer from such affections.[21] In 1888, James Ross argued for a close relationship between hysterical headache and true migraine, describing the former as

"frequently limited to one spot, and feels as if a nail were being driven through the skull; hence it is often called *clavus*." According to Ross, menstrual periods and mental worry increased the severity of the headache, while "amusement and anything which engages the attention" would end an attack.[22] Ross nevertheless warned of mistaking hysterical clavus for migraine. True migraine, Ross explained, was not only hereditary, but generally followed the female line, from mothers to daughters. This inheritance would not necessarily show up directly, as hemicrania. Rather, headache was just one possible manifestation of a "neurotic tendency," along with epilepsy and insanity.[23] As Joanna Kempner has observed, nineteenth-century authors like Ross had become adept at making arbitrary distinctions between medical categories.[24]

Migraine, Neurology, Psychiatry

Nervous diseases were a large and unwieldy category. Although a symptomology of seizures and periodicity seemed somehow to connect disorders such as paralysis agitans, epilepsy, tetanus, migraine, and hysteria, the links remained stubbornly resistant to explanation. In attempting to unravel the web of connections and theories relating migraine to a host of other problems in the late nineteenth century, it is important to realize how often investigations into malfunctioning minds and bodies overlapped. Nerves were dealt with in a variety of institutional contexts, and, significantly, there was no real division between neurology and psychiatry throughout the nineteenth century.[25] William F. Bynum has described lunatic asylums as "museums of neuropathology" for patients with a whole range of diseases of the nervous system, including neurosyphilis and epilepsy, in addition to those we would now classify as mental illnesses.[26] Alienists, as asylum doctors came to be known in the 1860s, were interested in boosting the status of asylum medicine by dedicating themselves to a broad range of problems: mental pathology, psychology, physiology, and neurology.[27] One of the most important settings for early research on the brain was the West Riding Lunatic Asylum, a site of "fruitful interchange" for neurologists, psychiatrists, physicians, and pathologists. The *Reports of the West Riding Asylum* (the predecessor to the journal *Brain*) reveal a whole range of experiments on physiology, specialist diagnostic equipment, and pharmacological preparations, such as chloral hydrate and amyl nitrite. John Hughlings Jackson and Thomas Clifford Allbutt, both prominent commentators on migraine, were part of this circle.[28]

An experiment in treating migraine with cannabis at the Sussex County Lunatic Asylum illustrates the exploratory culture at the intersection of neu-

rology and psychiatry. In the asylum's 1871 *Annual Report*, Richard Greene, the assistant medical officer, reported on *Cannabis indica* (Indian hemp) as a potential treatment for migraine. Unlike many other contemporaneous remedies—for example, digitalis—it appeared that cannabis could be taken in large doses "without producing any unpleasant effects" and did not require "the exercise of any fortitude by the patient." Although there is some evidence for employing cannabis as a treatment for headaches and migraine in the Middle Ages, the more modern use of cannabis for migraine seems to derive from John Clendinning's 1843 proposal, mentioning "cannabis sativa of India" as a favorable alternative to opium, which had a wide range of unpleasant side effects.[29] In 1870, Scottish psychiatrist Thomas Clouston was awarded the Fothergillian Gold Medal for his experiments with opium, potassium bromide, and cannabis to treat acute mania in patients at the Cumberland and Westmorland Asylum.[30] In 1871, the same year when Richard Greene was experimenting in Sussex, Francis Anstie suggested using between a quarter and a half grain of "*good* extract of cannabis," rather than strong narcotics such as belladonna (deadly nightshade) and opium, as an "excellent" remedy for migraine in children.[31]

At the Sussex asylum, Greene had only been in his job for a few months, following the retirement of Charles Lockhart Robertson, who was also the editor of the *Journal of Mental Science* (later the *British Journal of Psychiatry*). Under Robertson, the Haywards Heath Asylum had been well known for its experimental approach. Robertson and his assistant medical officer, S. W. D. Williams, had regularly contributed to *The Lancet* and the *British Medical Journal* on subjects such as the use of Turkish baths, the sedative action of cold wet sheets in treating mania, the nonrestraint of patients, fractured ribs, and the therapeutic use of digitalis. Despite these contributions, the Haywards Heath staff believed county asylums were under "constant reproach" from both the medical and general press for doing little to advance knowledge of mental diseases.[32] So, in the year Greene arrived, a new feature had been added to the Sussex Asylum's *Annual Report* to record novel and successful treatments. In 1871, experiments included the use of potassium bromide and amyl nitrite in the treatment of epilepsy, and ergot of rye for insanity.[33]

Greene commented that migraine was an illness "over which medicine has no control." Substances such as arsenic, quinine, injected morphia, or alcoholic stimulants were "perfectly valueless" as a permanent cure, or even, in most cases, as temporary relief. Greene had often used cannabis previously in his work with patients in lunatic asylums and claimed that it nearly always

produced some benefit. Greene discussed his treatment of six cases of migraine (four women and two men). In each instance, cannabis given as an alcoholic extract seemed to reduce the severity and frequency of the migraine attacks. In the only doubtful case, the patient admitted to not having taken the medicine regularly but added that "a double dose when the headache was coming on often relieved it." One woman had experienced migraine for upward of twenty years. After taking half-grain doses of cannabis in the morning and night for five weeks, "great improvement followed." Increasing the dose to one grain reduced the severity and frequency of the headaches still further. Greene lamented that if only he had been able to persuade the patient to give up the "wretched stimulants" of tea and coffee, even greater relief might have been obtained. He concluded that although cannabis was not a cure for migraine, it rarely failed to improve even the most apparently hopeless cases.[34]

Greene's experiment in treating migraine with cannabis brought together changing ideas about the brain, concerns about the professional status of medicine in provincial asylums, attempts to find pharmacological treatments for a range of mental and neurological illnesses, and a growing recognition that migraine was being particularly poorly treated. During 1872, the major medical journals carried several reports on the use of Indian hemp and guarana (which contained large quantities of caffeine) for the treatment of sick headache. At St. Thomas's Hospital, Dr. Charles Murchison's experience with guarana was "not very favourable," while Dr. John Murray at Middlesex declared it "sometimes of great value . . . at other times equally valueless." By the end of the year, the editors of the *British Medical Journal* concluded that guarana—which, in France, had been used for migraine for some time—should "be brought prominently before the notice of the profession," and that more extended trials were needed.[35] Both the Sussex experiment and the reports from other hospitals bring migraine squarely into the bounds of an uncomfortable historical reality: therapeutic experimentation, however well-meaning or ultimately beneficial, relies very heavily on the bodies of poor and vulnerable patients.

The National Hospital

Queen Square in central London is almost hidden in the narrow space between the world-famous Great Ormond Street Hospital for Children and the tourist hotels of Bloomsbury. At its center is a quiet, leafy garden—a space of calm in the midst of central London—overlooked by buildings housing neurological research and imaging laboratories, the National Hospital for Neurol-

ogy and Neurosurgery, and the University College London Institute for Cognitive Neuroscience. A plaque on the wall of the Queen's Larder tavern explains that this place has been associated with healing since King George III stayed privately on the square while under the care of Dr. Thomas Willis. Author Robert Louis Stevenson described the square, set apart from the bustle of Bloomsbury, as "a little enclosure of tall trees and comely old brick houses . . . it seems to have been set apart for the humanities of life and the alleviation of all hard destinies."[36] An act of Parliament had placed the center of the square in the care of the residents.

In 1860, the square witnessed the opening of the National Hospital for the Paralysed and Epileptic. The early hospital had eight beds for women, and its aim was to provide an alternative, less stigmatizing care facility than an asylum for patients with chronic neurological conditions, such as paralysis and epilepsy. It was to cater to patients from a poor or humble background who would be unable to pay for other kinds of medical treatment in private establishments. One of the criteria for admission was that the patient must be considered curable. If this changed, then the patient would be discharged, to be seen at the outpatient department instead. From the beginning, epilepsy and paralysis were the most common admissions to the National Hospital. The hospital provided specialized care and a dedicated space for neurological research in the center of London, and it soon outgrew its original building. The Hospital's board purchased the lease of the building next door from artist William Morris, allowing its capacity to be increased to sixty-four inpatient beds. Patients had use of a library, gymnasium, bathrooms, and day rooms attached to the wards. Physicians saw patients in consulting rooms, and the hospital had a small laboratory at the rear. In 1862, John Hughlings Jackson joined the consulting staff, visiting outpatients at their homes and inpatients twice a day. By 1870, when William Gowers was appointed as medical registrar, the hospital had ten physicians. The doctors at Queen Square, including John Hughlings Jackson, William Gowers, and David Ferrier, would become known as some of the fathers of English neurology.[37]

Elizabeth, the servant whose case opened this chapter, was admitted to the National Hospital on 10 April 1895. Her hospital casenotes follow a set format, giving details of the physicians involved in the case, her name, sex, age, and address. Most patients also received a diagnosis.[38] Fuller sections followed, outlining family history, the patient's previous health, the symptoms of their current illness, the comments of any family members present, and their physical and mental state during the consultation. The physicians paid a great deal

of attention to the patients' own descriptions of their symptoms, particularly when related to problems with speech, hearing, eyesight, weakness, dizziness, paralysis, and headaches. Elizabeth seems to have been the only female inpatient with migraine in 1895, and it is likely she attracted Jackson's interest because of the accompanying twitch in her left hand. For the physicians, symptoms of migraine and sick headache seem to have most often been worthy of attention when they promised to reveal a possible relationship to epilepsy, as well as the potential presence of lesions in the brain that might account for its pathology, a theme to which we will return in the next chapter.[39]

When the patients were women, the physicians asked questions about their reproductive history, the health of their children, and their menstrual cycles. Casenotes often included photos, cards tallying the fits or attacks day by day, and printed diagrams on which the location of pain and sensory symptoms in the head and body could be marked. The volume for 1895, in which we find the casenotes for Elizabeth, contains details of seventy-three patients. While Jackson oversaw the patients' treatment, their day-to-day care was in the hands of the hospital's house physicians. Two-thirds of the women and girls in 1895 were under the care of A. J. Whiting, and each patient also had a named clinical clerk—often one of the other house physicians. The volume gives a useful snapshot of the variety of disorders the physicians considered. There were ten cases of disseminated sclerosis, thirteen of epilepsy, seven of neurasthenia, and six of peripheral neuritis, as well as a variety of tumors, cases of paralysis (including two infants), neuralgia, myelitis, fits, and chorea. In 1895, the hospital admitted girls as young as ten months old, and women into their sixties. They were the daughters of bootmakers, hat blockers, warehouse porters, bakers, bricklayers, an innkeeper, and a laundress. Elizabeth was the youngest of seven female servants admitted in 1895, but other patients' jobs included housekeeper, governess, nurse, and cook, as well as the wives of a baker, clerk, coachman, licensed victualler, carpenter, spinner, traveler, printer, and one "theatrical." The majority of the women were from London or its surrounds—including one coming directly from the Newington workhouse. Others journeyed much farther across England. An eleven-year-old girl traveled more than two hundred miles from St. Columb in West Cornwall, while other women came from rural Lincolnshire, Norfolk, and Shropshire.

It is likely that Elizabeth got to know some of the other women who were admitted around the same time. There was Isabel, whose sister explained that her sibling had been quite well up until five months previously, when she fell down suddenly. Sometimes Isabel foamed at the mouth and bit her arms,

refusing to answer questions or speak. Isabel complained of a lump in her throat that "nearly chokes her sometimes." On 1 May, her notes record that when Isabel had a fit, the physicians took "no notice, and deliberately avoided an examination." The fit apparently "ceased spontaneously in less than a minute," leading the physicians to conclude that these attacks were "favoured by the presence of one or more doctors." The doctors complained that Isabel could not be trusted to give reliable statements when having her vision tested, and she appeared to lie about whether she could hear a tuning fork placed on her teeth. Although her casenotes record multiple fits, Isabel was discharged. Elizabeth was also joined by Lily, who had a history of epileptic fits that had initially been brought on by fright after her brother was brought home dead from drowning, an incident that itself was caused by a fit. Lily was discharged and sent to the hospital's convalescent home in East Finchley, north of London, on 28 April, apparently against her will. A comment on her notes asks, "Why was she sent here?" Then there was Eliza, diagnosed with alcoholic neuritis, who had given up working eight weeks earlier because of the pains in her feet and legs. Eliza denied she was an alcoholic, "but her friends give a different account," telling the doctors that she would drink half a pint of brandy a day. Elizabeth was discharged on 5 June, having remained "quite free from migraine or twitchings for several weeks." She, too, was recommended for referral to East Finchley.[40] These casenotes, as partial records of conversations physicians had with their patients and observations made about their lives give a moving glimpse of the patients' own voices as they tried to explain their illness, often through the contexts of family history, work, and daily life.

Although there are relatively few inpatient cases where migraine was the primary diagnosis, the physicians often recorded headaches, particularly sick headaches, as relevant to a patient's personal and family history for a variety of disorders. One sixteen-year-old boy, diagnosed with epilepsy in 1877, noted that his mother was subject to headache, and his thirteen-year-old brother had sick headaches all his life. The boy himself explained that ever since he could remember, he had "suffered from headaches which were brought on by over-exertion or over excitement, noise, or indigestion."[41] A young woman from Stevenage, whose illness did not receive a diagnosis, recalled that she had been liable to severe sick headaches her whole life, but she had never felt giddy until about ten weeks previously. The doctor's notes recorded that one Saturday, she had a bad "sick headache," and, on the following day, felt "ill generally." On Monday, "she noticed a sort of 'swimming in the head' as soon as she got up & on stooping over the wash hand basin she pitched forwards." She

had to be very careful going down stairs, and during the one-mile journey to a doctor, she found she could not walk straight: "Objects before her appeared dancing about, not moving in any particular direction. After her walk the sense of giddiness was much greater, so that she could not look upwards." The next day, she continued to feel ill, giddy, and "shook much."[42] These symptoms continued for almost two weeks, her head was hot, and she could not eat.

In a case study published in *The Lancet* in 1874, we meet Thomas R. This account is filled with the everyday realities of coping with the type of symptoms common to migraine. We first meet Thomas being sick in his own backyard and then collapsing on his stairs. Later, Thomas described how he frequently dropped things: "If he places his stick [in his left hand] in order to open the garden-gate with his right, the stick often falls out." His illness affected his work as a tailor—one day he severely burned his insensible left hand with a hot iron—and his impaired vision affected his perception of the world around him. He saw the word "land" rather than "Midland" painted on the side of a cart, remarking to his son that "Liver" was a strange name. His son pointed out that the word was Oliver.[43]

In a now classic article from 1982, sociologist Michael Bury discusses the concept of chronic illness as "biographical disruption." Grounding his observations on work with patients with rheumatoid arthritis, Bury notes that when professional medical knowledge about a disorder is incomplete or based on practical trial and error, individuals have to rely on "their own stock of knowledge and biographical experience" as a way to cope with illness and answer questions such as "why me?" and "why now?"[44] We can see this process occurring in these historical case records, where the incomplete knowledge of the professional met the lived experience and worldview of the sufferer. Patients at the National Hospital frequently explained their migraine attacks as having a distinct cause, often a significant event in their lives. One thirty-six-year-old woman described how she had given birth to a full term but stillborn child three months earlier. After a few days, as the fever that accompanied her breast milk coming in subsided, she began to experience pains on the left side of her head. At first the headaches lasted for a week. Now they lasted half an hour or so, but with no more than an interval of an hour between the headaches, and she was sick every few days. After being given quinine, calomel, and a full diet, she was discharged, seemingly improved.[45] Janet, a forty-five-year-old cook from Hampstead in London, reported that despite never being very strong and remaining in delicate health since the age of twenty-three, she had worked all her life until being admitted to the National Hospi-

tal in February 1899. Thirteen years earlier, in 1886, she "had some teeth out under gas," and a week later was seized with a headache that came on over two days. She fainted, and then was sick repeatedly for twenty-four hours. The pain, always in the right side of the head, "was of an agonising shooting nature" and lasted a week each time. After five weeks in the Women's Hospital and a month at a convalescent home in Brighton, she had felt well, but six weeks later she experienced a similar attack. Since then, this had happened every two weeks. She had a "striking feeling of *bien être*" just before the attacks began, and felt "remarkable well" afterward. While it was commonly understood that migraine tended to improve around the time of the menopause, for Janet the attacks had become much worse since "the change." Now she never recovered between attacks and had "a constant feeling of pressure on the top of her head." As the attack came on, she saw "zigzag flashes of light on a normal visual field of the left eye" and "similar flashes and black spots in the right eye." Recognizing that the "exciting causes"—what we now would term triggers—for her attacks included heat, excitement, and tiredness, Janet benefited from the diet and rest during her sixty-nine days as an inpatient at the National Hospital. She even put on a few ounces of weight before being discharged as "improved."[46]

The language available for people to describe experiences of pain and disorientation was both shaped by and a reflection of the social and cultural environment in which they lived and worked. Emma Jane, a forty-two-year-old woman seen by Jackson in 1892, described noises in her head and ears that sounded "like an engine letting off steam."[47] William Gowers's casebook records the admittance, in September 1898, of Augustus, a fifty-four-year-old cabdriver from Hammersmith, who had long been affected by headache, staggering, and general weakness. As many others did, Augustus considered himself healthy. He was married, with nine children (of whom five survived, well and strong), had always been strong, and never had any serious illness. Yet, for twenty years, Augustus had experienced attacks of severe pain in the left side of his head, followed by severe vomiting, dimness of vision, and an inability to fix his sight on anything. These attacks, occurring from every few weeks to months, usually lasted for twelve to twenty-four hours. Eleven years earlier, in 1887, he had been forced to give up work and took to his bed "on account of the almost daily occurrence of the headache, giddiness, and vomiting." During attacks, "he used to stagger & had a feeling like that of seasickness of the stomach." On that occasion, he spent six months at the National Hospital. He got better, and for the next nine years had only occasional attacks until,

sixteen months ago, he again began to experience them daily and had been "laid up" ever since. The cabdriver's casenotes described his symptoms:

> He rises from bed feeling quite well. So soon as he begins to walk about he experiences a tight feeling beginning behind the right ear but soon becoming localised over the left side of the head. The tight feeling begins to throb and an intense headache comes on generally confined to the left side but sometimes spreading over to the right. He has a feeling at the pit of the stomach as if he is going to be sick. He has to lie down to relieve the pain & if he is unable to rest directly the pain comes on he staggers about & is giddy & the attack will last much longer than if he rested. His eyes are so painful that he keeps them closed. Occasionally he has seen flashes of light. After 4–12 hours pain he begins to vomit and brings up bile. The vomiting lasts several hours and when it ceases the headache goes and he feels quite well.[48]

Accounts like Augustus's and Janet's reveal the effect of migraine on working lives and the unpredictable nature of chronic illness. Janet considered her overall health to be "delicate," while Augustus seems to have separated his experiences of migraine from what he considered to be his general good health and strength, a pragmatism in the face of unavoidable, expected problems that sociologist Jocelyn Cornwell has termed the notion of "normal illness."[49] Both Janet and Augustus had experienced periods of remission, seeking help only when the symptoms had become so bad that they had once again been forced to stop working.

Some patients journeyed long distances to see the neurologists at Queen Square. In 1891, a twenty-three-year-old carpenter traveled more than 250 miles from Penzance, in far southwestern England. For nine years, George had been subject to attacks that initially affected his vision, followed by a pricking sensation that began in his fingers. The feeling traveled up his arm to the shoulder, across the chest, to his mouth, and ended, around a quarter of an hour after his vision first dimmed, with a severe pain in the temples that continued until he went to sleep. Sometimes, when the sensation reached his mouth, George found he was unable to speak clearly enough to make people understand what was happening. These attacks occurred about three times a month, leaving him weak and ill for two or three days afterward. The casenotes describe a "healthy looking man." After seventeen days in the hospital without an attack, he was discharged, with a month's medicine, as his case was deemed to have "improved."[50]

The casenotes of Jane—a thirty-year-old woman who traveled 140 miles

from Gorleston, on England's east coast, and was admitted under Dr. Thomas Buzzard in May 1881—provides important evidence of the options for self-medicating migraine in the late nineteenth century. Jane had experienced headaches since she was ten years old, though she could not think of any particular cause. The attacks came on suddenly, with pain in the right eye, spreading to the forehead, and then over the right side of the head. Attacks would last a whole day, with vomiting several times an hour providing no relief. She had been prompted to seek specialist treatment after noticing some months earlier that her right eye did not look straight forward after some of the attacks, but turned slightly outward. In January, this had worsened. After one attack, her right eye "looked very much outwards and the eyelid completely closed," so she could not open it. Although her eye had improved, it had never been "quite well" since. Jane had tried "all kinds of diets, starving herself & lived once on toast and water for a month." This did no good. She had taken patent medicines and chlorodyne, and tried "Pulvermacher's and other appliances."[51]

Chlorodyne was one of the most famous nineteenth-century patent medicines, initially created by Dr. J. Collis Browne, an army surgeon, around 1850 to treat cholera among the troops, but it was soon marketed by rival brands, such as Freeman's chlorodyne. Sold in tablet form, the medicine was a compound of morphine hydrochloride, cannabis extract, nitroglycerin, hyoscyamus (henbane), chili oil (now more commonly known as pepper spray), and peppermint oil.[52] Pulvermacher's sold a variety of flexible chain belts, which were attached to a galvanic battery. Marketed as a cure-all for nervous and chronic diseases, the belts promised that "Electricity, Nature's Chief Restorer," dispensed with the need for medicine.

Under Dr. Buzzard, Jane was prescribed a range of substances, including hydrocyanic acid diluted in soda water to stop her vomiting, and then, an hour later, chloral and potassium bromide. Her casenotes recorded that the "pain was very much relieved and she slept." Although the pain continued throughout the next day, it was much less severe and "bearable." The following morning she felt well, apart from a sinking feeling in her chest and throat. Three days later, Jane was given gelsemium, commonly used as a treatment for neuralgia. On 22 May, after only two weeks in the hospital, Jane received the news that one of her children was ill. The following morning, one of the attacks began, giving the physicians an opportunity to see the effects on her eyes. Their observations, and Jane's treatment, had to be cut short, however, as she returned home to her family.

Hydrocyanic acid had long been used in preparations such as cherry-laurel water and could be made by distilling the leaves of *Prunus laurocerasus*. In 1789, William Cullen had noted the powerful sedative effects of this highly poisonous substance. Although widely rejected in the eighteenth century because of its toxicity (the acid's vapor could quickly kill rabbits, cats, and dogs), it had returned to the materia medica in the nineteenth century as an antispasmodic and a more efficient sedative than opium. Potassium bromide and chloral were also sedatives commonly used for treating epilepsy.[53] In 1872, Dr. Samuel Wilks was effusive about potassium bromide's value for treating sick headache (apparently his own), as "it can scarcely be superseded by a better remedy."[54]

Pharmaceutical Cocktails

Annie, a thirty-two-year-old butcher's daughter (she indicated no occupation of her own) from Wimborne, in Dorset, could tell when a headache was coming on, as black dots danced about in front of her eyes for a day or more. She also experienced shivers. The pain nearly always attacked the right side of the head, and it usually began in the morning. At first the headaches had struck once a month, but now they came every week, lasting over two days. When the headache was at its worst, around twelve hours after it began, she vomited. For two years, Annie had experienced persistent pain on the vertex (the top surface of her head), which felt tender under pressure and was worse on some days. There was little in her family history to explain her illness. Although her father had heart disease, and a sister was anemic, her mother and five brothers were healthy, and the family was "not nervous." From the age of twelve, she had suffered with disease in her right hip. The abscess had been opened, the joint had been excised, and it had "discharged constantly until two years ago." Four months earlier, the hip had been very painful, but now it was better. Annie felt that the healing of her hip two years previously was significant, because the head pain commenced "just at the time when the hip ceased discharging and she associates these two facts." Before coming to Queen Square, Annie had tried many different treatments, including tonics, quinine, antipyrin, phenacetin, and bromides. Until three or four months ago, two fifteen-grain powders of antipyrin would stop the headache: this had been better than anything else she had tried. Annie was admitted to the hospital on 17 March 1899, under the care of William Gowers. On 28 March, she was able to give the physicians a clear description of her attack, as she had experienced a vertical "thumping pain" up the right side of her face and had been sick in the night.

She was put on a diet of milk, eggs, and bread. Although she felt better the following day, Annie then came down with influenza. Two weeks later, she reported that she had had a constant headache every day since, never being free from pain for more than five minutes. Every morning she would have "nettle rash" on her arms, legs, and neck. On 21 April, the casenotes record that she had been sleeping better since 12 April, when digitalis had been added to her nighttime medicine.[55]

During her stay as an inpatient, Annie received an astonishing array of pharmacological substances and experimental treatments. On 17 March, the physicians began with chloralose, an anesthetic and sedative. The following day she was given a mixture of diluted phosphoric acid, liquid strychnine, liquid trinitrine, and tincture of gelsemium. This combination is significant, because it is an early version of what would become one of William Gowers's most famous legacies, a migraine treatment known as Gowers' Mixture, which contained nitroglycerine, sodium bromide, gelsemium, strychnine, nitric or hypobromic acid, and chloroform and was in use until the 1970s. For Gowers, the most important element was the trinitrine, in the form of nitroglycerine, which acted as a potent vasodilator.[56] Two days later, on 19 March, Annie was prescribed fifteen grains of antifebrine, a treatment for fever and pain. Over the next few weeks she was also dosed, in various mixtures, with calomel (mercury chloride), potassium bromide (an anticonvulsive and sedative often used for epilepsy), brandy, migranin (a preparatory medicine), more trinitrine, morphine, chloral (a sedative with hypnotic effects), senega (a stomach irritant), antipyrin (an analgesic known to cause rashes and cyanosis), cannabis tincture, phenacetin (an analgesic), and two potent plant extracts—digitalis (from foxglove) and belladonna (from deadly nightshade). Annie was also given exalgine, a substance often prescribed for neuralgia and migraine, although its safety and dosage had been much debated during the 1890s, after several cases of poisoning. On 29 May, Anne received cannabis for the last time. A day later she was discharged, after becoming "mentally affected" for the previous three or four days. She had "imagined that the other patients were always talking about her and discussing her private affairs." She had also taken a "strong dislike" to the night nurse and night sister and seen "funny wriggly animals round the bed." Regretfully noting that she had previously been of "a particularly nice disposition," the physicians discharged her. It is hard not to conclude that this change in her personality must have had something to do with the cocktail of drugs that she had been given over the previous six weeks.

Conclusion

In 1897, Samuel Potter's *Handbook of Materia Medica* recommended antipyrin as "the most single valuable remedy for headache, especially in migraine." Depending on the type of symptoms or the constitution of the patient, the book also suggested the use of phenacetin, belladonna, cannabis, camphor, croton-chloral, caffeine, valerian, ammonium chloride, potassium bromide, ergot, menthol, arsenic, aconitine, amyl nitrite, sanguinaria, nux vomica, cimicifuga, or a rubber bandage.[57] In contrast, a volume of standard pharmaceutical formulas published by *Chemist and Druggist* in 1904 simply listed antifebrin, phenacetin, and caffeine as the three recommended substances for treating migraine.[58] Behind this authoritative, simple statement lay a history of theorizing, guessing, and experimentation on patients like Annie. Desperation sent them to famous neurologists such as William Gowers, John Hughlings Jackson, and their colleagues, but the role that the patients' pained bodies played in the development of these new drugs was swiftly forgotten as the casebook pages turned to record new life stories. It was, of course, the "objective" work of Gowers's brain that was immortalized in his eponymous migraine mixture, not the subjective pain of bodies like Annie's.

During the nineteenth century, there had been radical changes in how migraine was thought of and treated. For centuries, physicians and patients had shared a common language and perception of megrim, bilious headaches, and sick headaches that reflected the long legacy of humoral theory. As physicians embraced nervous physiological theories from the eighteenth century onward, however, they increasingly presented their patients as holding "deep-rooted," "loose," and "conventional" notions that made the latter's statements untrustworthy. By the middle of the nineteenth century—at least in professional medical discourse—migraine had become an affliction firmly associated with a whole range of functional nervous disorders, in particular, the problems of exhausted young women. Institutions such as the Sussex County Lunatic Asylum and the National Hospital provided physicians with a wide range of opportunities for neurological, psychiatric, and pharmaceutical innovation, and migraine was just one of many ailments that attracted researchers' interest. As professional and lay medical knowledge diverged by the end of the century, new explanations and treatments for migraine that emerged from such settings laid the foundations for twentieth-century approaches to migraine's relationship with class and gender.

In the early twenty-first century, the lawn in the center of Queen Square is

shaded by trees and encircled by wooden benches dedicated to patients, doctors, and staff of the hospitals that surround it. Plaques commemorate inspiring clinicians, night sisters, nurses, beloved babies, teenagers, grandfathers, and residents, as well as staff from the Homeopathic Hospital who were among 118 people killed in the Trident air disaster in 1972. At the southern end of the garden, a life-sized statue of Sam the cat jumps over a wall, and an ice cream van parks just past the children's intensive care ambulance. Patricia Finch's sculpture of a mother holding a baby, and the hum of the Mobile MRI Scanner Unit outside the National Hospital, remind visitors of the discoveries, grief, fear, and joy that this remarkable corner of London must have witnessed. It is here that patients, relatives, and staff have waited, contemplated, wept, rested, and endured. It is not possible to follow Elizabeth, Janet, Augustus, and Annie after their discharge from the National Hospital. We cannot know whether their relief from migraine was short lived, or how their future lives played out as they continued to try and manage work, families, and illness. As they descended the hospital's steps onto Queen Square, perhaps they, too, sat for a while in the garden, gathering their strength before returning into the throng of the metropolis.