

Chapter Three

Defining Difference

Competing Forms of Ovarian Surgery in the Nineteenth Century

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Introduction

“The perfecting of ovariectomy has resulted in saving and prolonging the lives of multitudes,” the British surgeon John Halliday Croom declared in 1896.¹ Croom was reflecting on an operation that had, over the preceding fifty years, irrevocably altered the landscape of surgery. In the second half of the nineteenth century virtually no other operation garnered as much attention in Britain as that for the removal of diseased ovaries, and during which the operation undulated between controversy and accolade. In the mid-decades those who performed it were frequently lambasted, ridiculed, and even condemned as criminals by opponents who considered its high mortality rate unjustifiable.² By the 1890s, with a drastic diminution in the operation’s mortality, and a rich archive of printed material now circulating among the medical community that showed hundreds of cases of the operation where the patient had been cured, ovariectomy had ascertained not just respectability but was viewed as emblematic of Victorian progress in medicine. The fruit of ovariectomists’ labor was manifest in the many numbers of patients who had survived the operation and could now return to a life free of ovarian disease. In 1877 Thomas Spencer Wells (1818–97), Britain’s most eminent and well-known ovariectomist, gave the address in surgery at the annual meeting of the British Medical Association in Manchester. In his speech Wells proclaimed that his ovariectomy operations alone had added

eighteen thousand years to the lives of European women.³ Such sentiments fitted in with broader understandings Victorian surgeons had of themselves as a civilizing force, both an intellectual and a moral one, their life-saving work a melding of sagacity and selflessness, augmented by the fact that it was women—the wives, mothers, and daughters of Britain—who were being drawn away from the clutches of disease.

Looking back, the history of ovariectomy might initially be viewed as simply one more example of a typically successful medical innovation: the resistance its advocates encountered before improvements in the procedure, and subsequent acceptance among the majority of the profession, marked its introduction into mainstream medicine. Certainty as the first major abdominal procedure to come into practice, ovariectomy raised difficult questions about the propriety and management of innovation as surgeons began to venture into the peritoneal cavity. For these reasons, and as I will show in this essay, ovarian surgery is a singularly good example of how the politics of surgical innovation was negotiated in the nineteenth century.

However, a close reading of the operation also suggests the limits of ascribing any kind of “career” model of innovation to ovarian surgery. I show that because the meaning and definition of “ovariectomy” was continually changing, the narrative of its innovation was (and is) unstable; while “ovariectomy” might ostensibly have been one operation, it was also many, and how exactly it was defined was constantly in flux, as the meaning of the operation was renegotiated. Of particular focus in this essay are the later decades of the nineteenth century, when different techniques and objectives for ovarian surgery proliferated. What happens when a surgical innovation develops a further innovation, and to what extent were these understood as distinct? What role does nomenclature play in this? Although the British experience of the operation is this essay’s focus, international—and particularly transatlantic—connections between surgeons play a pivotal role. Difficulties in defining ovariectomy were heightened by the fact that new forms of ovarian surgery were arising from different countries, and concerns regarding priority and propriety motivated some to forge national distinctions between the various types.

Ovariectomy provides a useful way of unpacking not just the process of surgical innovation but also the usefulness of innovation as an analytical category in the history of medicine. How might we pin down the meaning of “innovation”—let alone “alternative innovation”—in surgery when these innovations themselves are unstable, changing entities that are difficult to define? Through the example of ovariectomy I show that alternative innovation need not necessarily imply competition between diverse innovations, but that such a framework might also be used to consider how different versions of the “same” operation arise.

“The Most Startling Innovation”: The Invention of Ovariectomy

The powerful gender dynamics at play in ovariectomy have been the primary concern of most twentieth-century and contemporary historians who have examined the operation. In the 1980s and 1990s social and gender historians began to extricate the operation from the confines of triumphalist narratives (the formation of which was itself a critical aspect of ovariectomy's identity as an innovation), and the issue of women's submission to the operation became integral to a new historicization of it. Work by Ornella Moscucci stressed the role of gynecology—of which ovariectomy was the surgical showpiece—in forging constructions of Victorian femininity in Britain.⁴ Through this reading, ovariectomy's status as a radical and innovative procedure was not merely a testament to surgical heroism, but instead revealed an operation implicitly tied to societal expectations regarding the role of women, which in turn helped legitimize a culture of novel and experimental surgery focused on the female body. The historiographical shift divulged not only historians' questions about the gendered nature of this surgical innovation but also that of the historical actors under scrutiny: the gendering of ovariectomy was of as much consequence to opponents of the operation—who could emotively use the loss of female life in their campaigns against the operation—as it was to advocates arguing that they were saving women's lives.⁵

The impact of this work has been significant. But it has led to a tendency for gender to obfuscate other significant aspects of the operation;⁶ ovariectomy was by no means controversial solely for that reason. The claim of its novelty relied not just on removing the ovaries, but that the operation also called for the abdomen to be opened by a large incision. During the mid-eighteenth century, the possibility of surgically removing diseased ovaries became a subject of increased debate among British and French practitioners as attention turned to that organ's pathology. In the burgeoning field of morbid anatomy, the frequency and array of tumors found in the ovaries postmortem warranted attention.⁷ But the possibilities for treating the condition in the living patient were limited. Ovarian tumors, usually assumed to be a form of dropsy, were considered extremely difficult to diagnose—they were often mistaken for pregnancy—and almost invariably fatal. Although one might live with the disease for many years it was usually in great discomfort and with no hope of a cure.⁸ This grim state of affairs had been underlined by the work of the Birmingham physician William Withering, who in 1785 had published on the curative effects of digitalis on dropsical swellings. Withering admitted that the remedy was ineffective on afflictions of the ovary because of the peculiarity of their pathological makeup; “the ovarian dropsy defies the power of medicine,” concluded Withering in 1785.⁹

By then speculation had already begun in medical circles as to the possibility of using radical surgical means to cure the condition. In Britain, William Hunter cautioned against making large wounds in the belly, believing them too dangerous, although he conceded smaller incisions into the abdomen might be permissible in desperate cases.¹⁰ In France practitioners were rather more optimistic about the prospects of the operation, some suspecting ovarian extirpation would soon be a reality, although those who predicted its introduction declined to perform it themselves.¹¹ That ovarian surgery lingered as an idea during these decades complicates our understanding of innovation. Today we often associate the word “innovate” with rapid, radical change, and yet surgical innovation of the ovary was a drawn-out process, a theoretical possibility for many decades before it became a material reality.

A turning point came in 1809, when the American surgeon Ephraim McDowell successfully extirpated a diseased ovary.¹² The operation was the result not just of the patient’s bravery and the surgeon’s fortitude, but also bore the imprint of a surgical culture that was turning its attention toward the internal organs.¹³ After news of McDowell’s landmark procedure, decades of sporadic experimentation with the operation ensued in Britain.¹⁴ By the mid-1840s ovarian extirpation was still comparatively rare, but in Britain at least the operation was beginning to be performed with a degree of consistency. Nonetheless it remained a hazardous procedure and the operation continued to be highly controversial.¹⁵ Performers of the operation were alleged to have been decried as “belly rippers” by opponents. The term embodied the repugnance that was felt toward opening the abdomen, with its echoes of human vivisection.

The vanguard of practice in the midcentury was led by the Manchester obstetrician Charles Clay. Clay’s views of abdominal surgery were likely shaped by his mentor, Thomas Radford, who had been unusual in his advocacy of caesarean section at a time when the operation was considered unjustifiable by most.¹⁶ Radford had been present when Clay performed his first ovarian operation in 1842 on forty-six-year-old Mrs. Wheeler, who over the past three years had noticed a gradual enlargement of her abdomen. Clay noted that upon her consultation with him, she was “as large as a female in the ninth month of gestation.” A huge tumor within the pelvic cavity was suspected to have begun in the ovary. In consultation with Radford, Clay ruled that only extirpation of the tumor offered the chance of cure, and he proceeded to successfully removed it three months later, after Mrs. Wheeler had been given time to weigh the risks of the operation against the burden of her disease. In Clay’s notes recorded after the operation, he appeared conscious of its significance for surgery at large: “At this moment, none, but those who have witnessed such a scene, could have any idea of the extent and formidable appearance of the operation—the incision from sternum

to pubis over the bulky tumour could not be less than twenty-four inches (being eighteen when the parts were flaccid subsequently), perhaps as large an incision as ever was made in the living subject."¹⁷

Clay's first seven cases, of which there were five successes and two fatalities, were published that year as the pamphlet *Cases of Peritoneal Section for the Extirpation of Diseased Ovaria*. His concluding commentary attested to an already forming distinction between types of practice in ovarian extirpation. For Clay, incision size was what marked his practice apart. The striking length of the cuts he made into the abdomen put his work at the very edge of impropriety, the "belly ripping" that opponents feared, but it was also what made his work new, different, and daring. Clay was quick to draw distinction between his work and that of surgeons who erred on the side of caution when it came to incision size. Those like William Jeaffreson (1790–1865), a Suffolk practitioner, who had performed a number of ovarian extirpations in the 1830s and who made incisions of about an inch and a half, extending the cut only if necessary. Clay was adamant that this form of practice was an alternative to his own, and a poorer one at that, because the surgeon's view was obscured; "the mode pursued by Mr. Jefferson (sic) is not only impracticable, but really absurd," Clay wrote, claiming a lower mortality in his operations with large incisions.¹⁸ However, Jeaffreson appeared satisfied with a distinction being made between his and Clay's operations because it enabled him to claim priority on a separate procedure. In a letter to the *Lancet* in 1843, Jeaffreson described himself as "the originator of the minor operation."¹⁹ Matters of priority such as this were often at the heart of deliberations over surgical taxonomy, and as we shall see, it would not be long before further debates about priority occurred.

In modern surgery, general understandings of how an operation should be performed, for instance, as might be defined through a surgical manual or through instructions from senior surgeons, are frequently at variance with the idiosyncrasies of individual practice and the specifics of a patient's pathology.²⁰ In the nineteenth century, idiosyncrasy in surgical technique was an accepted tenet of practice. However, it could also be a source of frustration to those wishing to subject an operation to statistical investigation, which relied on a certain degree of standardization so that comparisons could be made. In 1843 incidences of ovarian extirpation began to be assimilated under a neologism that was coined to describe the procedure—"ovariotomy"—a term created by the obstetrician James Young Simpson in response to Charles Clay's operations and first used by Clay in an article for *The Medical Times and Gazette*.²¹ The word stuck, assured perhaps by the considerable professional influence of Clay and particularly of Simpson.

The coining of the term had implications for practice. The operation of ovarian extirpation had been performed by a rather disparate group of practitioners, only loosely connected. "Ovariectomy" suggested a shift

from a collection of individual operations to a collective identity, in which all occurrences of ovarian operations were expected to be made public. Nonreporting of ovariectomy cases was increasingly taken as evidence of occlusion of failed cases, and publication became the fundamental marker of authenticity. For the next two decades, during which the place of ovarian surgery would remain deeply contested, statistical collations of all known ovariectomies would be used by both advocates and opponents of the operation to defend their position. This endeavor marked the permeation of statistical data into the culture of medicine; “statistics will settle the question,” proclaimed one obstetrician confidently in 1844, in regard to the ovariectomy question.²² And yet, although both a fixed nomenclature and statistics brought a degree of clarity to proceedings, the statistics themselves were replete with caveats, with practitioners proffering diverse notions as to which of their operations should be included. For example, some ovariectomists did not report operations where they had opened the abdomen only as an exploratory procedure, and had not proceeded to remove the organ.²³ This only added fuel to the fire of those opponents who were steadfastly convinced that failed ovariectomies were not being reported because of fears of reprobation from the profession.²⁴

In the 1860s ovariectomy was still an uncommon operation, its practice mainly limited to private patients or those admitted to specialist hospitals for women. But it was beginning to receive wide-scale acceptance from the profession. A number of factors played into this turnabout in opinion. Time had proven that many women could survive the operation and remain cured in the long term. And some operators were beginning to achieve remarkable results, most notably the Edinburgh surgeon Thomas Keith, who in 1867 announced that four-fifths of his ovariectomy patients had survived the operation.²⁵ However, on general aggregate, the mortality for the operation remained high, at around one-third, which was similar to that of other capital operations.²⁶ More significant than any real decline in the operation’s mortality was the publication of a lengthy series of meticulously detailed cases by Thomas Spencer Wells in 1865.²⁷ Wells’s openness about his experiences did much to improve the reputation of the operation, alleviating fears that cases were being deliberately concealed. It suggests that the determination of a new operation’s success was dependent not only on a diminished mortality rate but also on the manner in which the operation was conveyed through published material.

The degree of change that ovariectomy signaled was now beginning to impress itself on the surgical psyche. As the surgeon William P. Swain wrote in 1866, ovariectomy was “perhaps the most startling innovation in surgery of late years . . . our old notion, that it was death to the patient to interfere with the peritoneum, has been somewhat rudely swept away by the wholesale manner in which it is now cut through, and burnt through, and mopped out with sponges.”²⁸

Such meditations spoke to the still precarious position that innovation held within surgical culture. The rich history of “innovation”—both as a word and concept—is not reflected on as frequently as it should be by historians, and yet given its constant presence in today’s world, it warrants attention. Benoît Godin has observed that “for most of its history the concept innovation, a word of Greek origin, carried pejorative connotations. As ‘introducing change to the established order,’ innovation was seen as deviant behaviour, forbidden and punished.”²⁹ Often synonymic with notions of “revolution”—another word that would come to have important connotations for nineteenth-century surgeons—“innovation” had long been associated with political and social uncertainty. In the nineteenth century, as the inventor was recast from eccentric outsider to heroic Briton of the Smilesean mould, innovation began to be understood more positively, or at least less as a signal of radicalism or instability.³⁰ Surgeons were by no means immune to this cultural shift. And yet as Swain’s words suggest, although ovariectomy was increasingly construed as a force of good, there were ripples of unease as to the extent to which surgery was being changed by the operation. Even if it was no longer considered an outright mischief, it remained shocking and somewhat brutal.

Wells’s success at bringing ovariectomy into the mainstream meant the operation soon became entrenched in a narrative that imagined it as an invention of Victorian progress. As a consequence, it also catapulted him into the surgical elite. Wells had been quick to claim credit as the surgeon responsible for “reviving” ovariectomy, much to the chagrin of Charles Clay, whose own cases having been performed entirely in private practice outside of London, and published separately rather than in book form, Wells deemed to have had rather less impact. Clay was accorded priority as the first surgeon to perform a series of ovariectomies in Britain, but the value of that contribution was now under attack as Wells began to publicly denigrate his role in the operation’s innovation.

The fluidity of definition was significant in their dispute. Initially Clay presented Wells as a poor-quality imitator, speaking almost nostalgically about the days gone by when “I had the operation to myself, when I had rather to originate than imitate plans of operation and after treatment,” inferring that was what Wells was in fact doing.³¹ Imitation, as the saying goes, is the highest form of flattery, and if acknowledged correctly, was considered acceptable behavior for surgeons. Tacit knowledge was a vital part of surgical education and new techniques were in part learned through witnessing the operations of others and subsequently imitating them.³² But this also had to be carefully negotiated. Unacknowledged imitation still had the potential to look like mere copying.

In later letters, Clay changed tactic and emphasized the polarity in his and Wells’s methods, arguing that their operations were “two distinctly

different modes of proceeding, if faithfully carried out.” Wells, for example, championed an abdominal incision of about 4 inches; Clay, as we have seen, favored making a much larger one. Wells completed the operation by securing a clamp to the remaining pedicle; Clay used ligatures. Wells treated the pedicle external to the peritoneum; Clay kept it within, and so forth.³³ Deconstructing their operating methods helped Clay differentiate between his work and Wells’s and strengthened his claim that he had created his own operation, which he argued was an entirely different procedure from Wells’s. Such priority disputes brought to the fore differences in practice, but Clay and Wells were not alone in having these differences. Surgeons’ methods for separating the pedicle from the tumor, for example, varied considerably and played a prominent role in discussions about the techniques of ovariectomy throughout the second half of the century.

The dispute between Clay and Wells showed that “ovariectomy” could only ever be an umbrella term for the numerous methods of practice that were being employed. To some degree every performance of ovariectomy was unique, each was dependent on the way the surgeon performed it and the patient who underwent it. Diagnosis before an operation remained limited, and many cases saw unexpected adhesions and complications being discovered once the abdomen was opened and its mysteries revealed. These variations did not necessarily negate the usefulness of “ovariectomy” as an indicator of the procedure being performed, although they did draw attention to its limitations. However, the stability of ovariectomy as a clearly defined form of surgery was soon to be much more seriously challenged as new ovarian procedures began to emerge.

An American Import: The Introduction of Battey’s Operation

In the late 1870s ovariectomists had never been held in higher regard. “Even now the most favourable ovariectomy is a marvellous liberty with the human body, and it is difficult to do justice to the courage and the faith of the men who first undertook it under every kind of discouragement from the heads of surgery,” opined the *Lancet* in 1877, reimagining the history of resistance to the operation as a test of courage for surgical prophets like Wells.³⁴ That obstetricians and surgeons were beginning to develop new ways of performing the operation would have been of little surprise. Modifications were constantly occurring and, as we have seen, practitioners often had their preferences when dealing with various aspects of the operation. Reduced mortality rates meant more opportunities to operate and a safer testing ground for new techniques. But in the late 1870s a new development was to emerge from America that would radically alter ovariectomy because it involved not just a change in technique but also objective.

The practice of Robert Battey has already been well-explored by a number of historians.³⁵ Indeed his name has become rather notorious in the history of medicine, synonymous with the seeming excesses of nineteenth-century gynecologists. Born in 1828 in Georgia and trained in Philadelphia, Battey returned from his duties as a Confederate Army surgeon in 1865, settling into practice in Rome, Georgia. He began to perform ovariectomies in 1869, his interest in the operation having been piqued in the late 1850s when a tour of Europe had led him to meet many practitioners of the operation, including Wells.³⁶ Battey had begun to hypothesize the use of ovarian surgery for conditions other than tumors soon after his return to practice. Perturbed by the numerous physical and psychological problems suffered by his patients with menstrual irregularities, Battey had developed the theory that if both ovaries were removed, menopause would ensue, thus effecting a cure. He put theory into practice in 1872 when he removed both ovaries from his twenty-three-year-old patient Julia Olmberg, who was suffering from a range of gastric, rectal, and epileptic symptoms.³⁷ Battey and his advocates would go on to perform the operation for a wide range of conditions, including, most controversially, on women whose menstrual disorders were believed to be causing hysteria, nymphomania, or insanity. As Lawrence Longo has shown elsewhere, the indications for the operation were strikingly vague.³⁸

The appellation Battey gave his operation was “normal ovariectomy,” chosen to reflect a belief that his method was a “truer” ovariectomy than that usually performed—which he described as “irregular ovariectomy”—because the ovaries he removed were not diseased. As he rather arrogantly described it, “it was I who had really and truly done an ovariectomy rather than Dr. Ephraim McDowell.”³⁹ Battey’s peers were critical of his appropriation of the word “ovariectomy.” Its inference that perfectly normal ovaries were being removed was liable to be misunderstood. This was far from ideal given that the propriety of ovariectomy had so often been questioned already. “Battey’s term, *Normal Ovariectomy* is inapplicable,” reasoned the St. Louis physician George Engelmann in an article analyzing forty-three cases of the operation published in 1878, Engelmann claiming that in the majority of cases the ovaries were in fact diseased, thus rendering the phrase even more misleading. As he further probed the nomenclature, conceptual and taxonomic confusion became apparent, for Engelmann then went on to argue that Battey’s procedure was “ovariectomy proper, and *Ovariectomy* it should be called, were not that term now, by long continued usage, given to the operation for ovarian tumours.”⁴⁰

By this time Battey had already acquiesced to the concerns of his contemporaries regarding the name of the operation and had sought to change it. This had been done in collaboration with the gynecological surgeon James Marion Sims, who was to become an influential supporter of the operation,

advocating its use under certain circumstances. At the end of 1877 Sims introduced the new procedure to Britain, by which time it had been performed by a variety of operators. His involvement with the operation warranted attention. Like Battey, Sims was from the South; his early medical practice had been in Montgomery, Alabama, where he had dedicated himself to improving the surgery for vesico-vaginal fistula. This brought him professional acclaim, but also left him with a dubious legacy, Sims having “perfected” his technique on enslaved black women, a number of whom were operated on multiple times.⁴¹ By the 1850s Sims had left the South for New York, where he built a reputation sufficient enough to propel him on to the international stage. After the outbreak of the Civil War Sims moved to Europe and spent the rest of his life dividing his time between London, Paris, and New York.⁴² Having succeeded in crafting an eminent reputation on both sides of the Atlantic—no mean feat—Sims was an integral figure in connecting American and European surgery and ideally placed to ease a new operation into the consciousness of British surgeons. In the final weeks of 1877, a series of articles by Sims was published in the *British Medical Journal* detailing twenty-eight cases where the procedure had been performed. Practices deviated considerably within these cases; some operators had used abdominal sections, others had extracted the ovaries vaginally, although this had a higher mortality. Battey’s theory was that termination of ovarian function was required to enable cure. And yet on a number of occasions he had himself extirpated only one ovary, either deeming the removal of one sufficient or because of the impossibility of removing the second.⁴³ The result was an operation that was distinct more through objective—preventing ovarian function—than its technique. It differentiated from the operations of Wells and Clay because it was the ovary as a whole rather than ovarian tumor that was considered the seat of trouble.

Sims emphasized a genealogical connection between the two procedures, framing Battey’s operation as the progeny of ovariectomy and citing the history of the first operation to forestall the profession rejecting the second too quickly. He wrote: “Without operative procedures, these cases are all hopelessly incurable. We must improve our methods or leave them where we found them. I see no reason why the operation should not be made safe and successful. Ovariectomy was once opposed because it was unsuccessful; but now it is accepted because it is successful . . . let us look back at our work, and see if it has always been well done.”⁴⁴

The connection between the two was thus leaned on to quell concerns about the new development, Sims reminding surgeons of the difficulties ovariectomy went through before it was accepted. Nonetheless the introduction of the operation to a British audience was also a convenient opportunity to rebrand the operation in a way that emphasized distinction. In his final paper in the series, Sims announced that Battey had asked his advice in

renaming the operation and that he had conferred on it the name “Battey’s operation,” urging European surgeons to “unite with us in America in giving it the name of the man who originated the operation.”⁴⁵ This renaming served a number of functions. First, it formed a connection between Battey and the procedure. In what was a calculated risk, Battey’s professional reputation was now intertwined with the fate of the operation. Second, it was used to more firmly differentiate the procedure from ovariectomy, expunging the confusion that “normal” ovariectomy had brought. In both respects, Battey and Sims were only moderately successful; the term “normal ovariectomy” would still continue to be used sporadically in Britain and America. Other terms soon came into use that diminished Battey’s proprietary hold on the procedure. In 1872 the American surgeon Edmund Peaslee had drawn attention to the failure of “ovariectomy” as an explanatory term and had suggested “oöphorectomy” as a more accurate one (the suffix “-ectomy” denoting removal, whereas “otomy” implied only incision).⁴⁶ Although this suggestion was not taken up in relation to ovariectomy for tumors, the phrase reemerged at the tail-end of the 1870s to refer to the removal of both ovaries to cease ovarian function. Initially British practitioners used the phrase interchangeably with “Battey’s operation,” although by the late 1880s it was “oöphorectomy” that was more commonly used. It seems clear that many practitioners did not wish their work to be associated with Battey’s. The Birmingham surgeon Robert Lawson Tait, for example, had begun removing the ovaries and fallopian tubes as a way of curing inflammatory disease (pyosalpinx) of the latter around the same time that Battey had begun performing his operation. His procedure was similar enough to Battey’s that the two were frequently compared, but Tait repeatedly felt the need to emphasize their difference, denying that he would ever remove the ovaries for anything other than inflammatory disease; “what Dr. Battey has advocated and practised, I, for one, practically have never performed,” he wrote to the *British Medical Journal*.⁴⁷ Tait eschewed both “Battey’s operation” and “oöphorectomy,” instead describing the operation as “removal of the uterine appendages.”

The change to “Battey’s operation” was no doubt conceived to have another important role: it asserted the American identity of the operation. Though never overt, there had long been a degree of tension between American and British surgeons as to who should be credited for introducing ovarian surgery. There was a feeling on the American side that not enough had been done to build on McDowell’s legacy in his home country.⁴⁸ The long series of operations performed by Clay, Keith, and Wells had shifted the central arena of ovarian surgery to Britain, and surgeons there claimed it was owing to British endeavors that the operation had flourished. Battey’s operation, on the other hand, was undeniably an American invention and accepted as such by British practitioners. The British response to

the procedure had been mixed. As we have seen, there was an expansion in home-grown gynecological surgery led by Robert Lawson Tait, who sought to distance himself from Battey. But other surgeons and obstetricians began to replicate Battey's model of operating, praising the American surgeon's enterprise in bringing the operation to the profession's attention. A glimpse into British patients' perceptions of Battey's operation—albeit one mediated through the narrative of the medical professional—was provided by the obstetrician Alexander Russell Simpson in 1879. Writing in the *British Medical Journal*, Russell recounted a patient with chronic menstrual pain who had implored Russell to perform Battey's operation on her after he had mentioned the developments occurring in American surgery. According to Russell, the patient claimed to have been “reading all about” the new operation, asking Russell, “Can't you do here what the doctors in America can do?”⁴⁹ It suggests that some patients were also schooled to recognize the distinct and distinctly American nature of the operation.

As Sims seemed to anticipate, resistance soon occurred in Britain. Anxieties were heightened by the mortality rate for the new operation, which, in the 1880s, was higher than that for ovariectomy. In 1883 Tait recorded mortality rates of 12.8 percent and 5 percent, respectively, although both had dropped to under 3.5 percent in his practice by 1888.⁵⁰ Critics both inside and outside the profession began to express concern about overoperating, much of which centered around fears that women were being “unsexed.” A pejorative and highly loaded term was soon being used to describe the apparent craze for ovarian surgery: that it had become a “fashion.” Such language not only pointed to the continued characterization of ovarian surgery as a novelty, but also the possibility of unthinking consumption of surgical trends on the part of both practitioners and patients. Ornella Moscucci has speculated that oophorectomies may have even been sought by patients as a means of preventing unwanted pregnancies.⁵¹

The revelation that the operation was being used experimentally to treat insanity also startled many, even those who were themselves ovariectomists. Thomas Spencer Wells spoke out forcibly against the new operation. In an essay published in the *American Journal of the Medical Sciences* in 1886, and later reprinted as a pamphlet, he described the procedure as an “unnecessary mutilation of young women.”⁵² For Wells, this unwelcome development could only be understood through the framework of nationality, its roots in the “fanaticism” of American surgeons.⁵³ But, he warned, its implications were global. “The danger is now increasing as the operation is becoming world-wide,” Wells wrote, “the oophorectomists of civilization touch hands with the aboriginal spayers of New Zealand.”⁵⁴ Wells picked his words carefully, crafting an image of oophorectomy that suggested savagery, in stark contrast to ovariectomy, which he depicted as a model of colonial advance, likening it to “the discovery of the Californian diggings or the African diamond

mines.”⁵⁵ Wells titled the essay “On the Castration of Women,” provocatively ignoring any of the more respectable terms to use instead a word that carried stigma and that suggested a violent, animalistic procedure rather than a progressive one. Regardless of the efforts of Battey and others, both “castration” and “spaying” would frequently be employed to describe operations to remove both ovaries. By doing so Wells showed the power such descriptive words had in conveying the precarious propriety of the operation.

“What Is Ovariectomy?” The Unravelling Nomenclature of Ovarian Surgery

“Conceptual history must start with lexical history,” it has been observed.⁵⁶ Surgeons of the nineteenth century may not have been averse to such an opinion. Medical nomenclature was of increasing concern in the second half of the century. In 1869 the Royal College of Physicians published the first of what would be many editions of their *Nomenclature of Diseases*. The pamphlet had originally been conceived in the midst of concerns about classification during the midcentury as public-health reform became a central focus on the medical profession. Fixed categories allowed for easier statistical analysis, and it was hoped the handbook would help form a standardized nomenclature that could be used both nationally and internationally. Its orientation toward public health meant that the bulk of the text was given over to the classification of disease. Nonetheless an appended list of surgical operations appeared in the first edition and was then considerably expanded in a later version published in 1885. In the latter edition, “ovariectomy” and “oophorectomy” appeared with the following definitions:

Ovariectomy. Removal of enlarged or diseased ovaries.

Oöphorectomy. Removal of healthy ovaries. *Syn.*, Spaying.⁵⁷

These definitions gave the impression that there was now a clear demarcation between the two types of operation. But in the everyday of surgery, no such clarity existed. By the end of the 1880s there was still considerable confusion surrounding the correct nomenclature for ovarian surgery. Generally “ovariectomy” indicated the treatment of tumors and cysts, and oöphorectomy, the treatment of inflammatory conditions, diseases of the fallopian tubes and the removal of the ovaries as a means of bringing on menopause. But the two terms were also sometimes used to indicate whether one or two ovaries had been removed, respectively. Thus, depending on the practitioner, the removal of *both* ovaries for ovarian cysts, for example, might be called “ovariectomy” or it might be called an “oöphorectomy” or even a “double ovariectomy,” to indicate both had been removed. This could make

gathering and comparing statistics for the operation complex, and Robert Lawson Tait often complained about the difficulty of making a distinction, particularly as in his experience ovaries were frequently afflicted with both tumors and inflammation.⁵⁸

This state of affairs was displeasing; as one surgeon wrote to the *British Medical Journal* in 1886, “the nomenclature is so various, and some of its terms so ambiguous, that all will concur in the advisability for the adoption of certain words which will indicate clearly particular operations.” At the end of his letter the correspondent simply asked, “What is ‘ovariotomy?’”⁵⁹ A response came one week later from an anonymous Fellow of the Royal College of Surgeons, who replied, “With every succeeding advance, fresh difficulties in division and in nomenclature have arisen . . . the question, ‘what is ovariotomy?’ is one which, at the present moment, it is perfectly impossible to give a definite and scientific answer to.”⁶⁰ The author’s implication that the term “ovariotomy” failed to provide an adequately *scientific* definition suggested that the proliferation of procedures was not the only problem. By the end of the 1880s the term also appeared increasingly outdated and unhelpful, doing little to indicate the histology of the tumor being removed. Many terms in surgery failed to reflect precise pathology, but with the “infinite and endless gradations” of ovarian tumor that were thought to exist, the “ovariotomy” seemed especially to convey an old-fashioned type of surgery that was scientifically imprecise.⁶¹

On a lexical level, a decline in the use of the word “ovariotomy” ensued from the late 1880s, with a particularly sharp drop from the first to the second decade of the 1900s. During this time “oöphorectomy” was increasingly favored to describe all operations where an ovary had been removed (as it continues to do so today), while advances in conservative surgery meant that ovarian cysts and tumors could now be dissected out so that the rest of the ovary could be retained. And yet while its use declined, that decline was markedly slow considering the acknowledged imperfections of the term. “Ovariotomy” did not shift easily from medical language even as its meaning became uncertain and where “oöphorectomy” was a more accurate term. Medical nomenclature is not easily changed once it has become common parlance, and clarity is not the only factor that occasions its use; as one commentator reflected in 1940, medical terminology is a “mixture in which historical and sentimental factors play a large part.”⁶² Ovariotomy, which had come to represent a poignant and triumphant episode in surgery, and which was steeped in history and emotion, retained a powerful symbolic resonance that was not easily lost. Because of this, by the end of the century, even when ovariotomy no longer seemed to have any clear definition, its presence remained. Throughout this time “ovariotomy” had lain on far safer moral ground than “oöphorectomy,” a word that continued to be associated with the overoperating controversies of the mid-1880s. The sensitivity

surrounding oöphorectomy may explain why the term “ovariotomy” continued to be used.

Indeed, despite its decline, the term “ovariotomy” has never quite disappeared from scientific use. Today, medical publications stemming from China and India still use the term, demonstrating the subtle linguistic shifts that can occur transnationally in medicine.⁶³ The long and complex lexical history of ovariotomy shows how the ascription of surgical nomenclature is far from a self-evident process, where words inherently connect to procedures; rather, nomenclature has significant ethical and professional ramifications.

Conclusion

Can the problems of defining difference in surgical innovation, described above, be viewed as exceptional to ovarian surgery? Or are these complexities representative more generally of surgical practice? In many respects ovariotomy is a singular example. It was an operation performed wholly on women, which imbued it with cultural politics more marked than that of less-obviously gendered operations. As the first form of major abdominal surgery to be introduced into practice, it also had a peculiarly emotive power among the surgical community, symbolic of hopes and fears about the future of surgery. It was during the nineteenth century that innovation came to be closely connected to concepts of “progress,” and yet concerns remained about the degree of change this might entail. That major abdominal surgery was being performed frequently, without clearly defined objectives or nomenclature, contributed to these anxieties.

This provides an interesting counterpoint to histories of twentieth-century innovation, revealing as it does the transitioning status of innovation in nineteenth-century surgery. But it also highlights strands of continuity. There has been a tendency to pinpoint the late twentieth century as the period when significant doubts arose as to whether innovation in medicine was beneficial.⁶⁴ Ovariotomy shows this is far from the case, the operation frequently giving rise to major concerns about the place of innovation in surgery. Its history also compels us to consider how managing surgical innovation today remains peculiarly complex. The aspect of performance that is central to surgery—which can make achieving uniformity in practice difficult—continues, and the difficulty in standardizing surgery makes it rather less compatible than other medical disciplines with prevalent frameworks of modern practice such as the randomized controlled trial.⁶⁵

What then did “Battey’s operation” represent? An alternative to ovariotomy or a version of it? In the late nineteenth century the boundaries were blurred. “Ovariotomy” was the term that had for many decades described

the extirpation of diseased ovaries, and it was clear that the shift toward removing ovaries to treat other forms of disease was, in part, the product of this innovation. For that reason the terms were often used interchangeably. And yet there were important reasons for both advocates and opponents of the new operation to distinguish it from the old. For Battey and his supporters, framing it as a distinct form of surgery meant the possibility of attaining priority for its invention, with all the attendant social cachet that might come from that should the innovation prove a triumph. For those wary of the new developments, the distinction offered a certain amount of security against accusations of impropriety. In Battey's case his claim to ownership on the new operation would not entirely pay off. His name and operation would go down in history, but not for the reasons he would have hoped. As ovarian surgery became subject to greater criticism, Battey was the man irrevocably associated with the "fashion" for removing ovaries, even if he was not the only surgeon to do so. Battey had gambled his name in the hope that personal association with the innovation would bring enduring fame, but it would also bring enduring notoriety. Battey's fate in this regard is as much a historiographical issue as it is a historical one. It is striking that in most secondary literature on nineteenth-century ovarian surgery, the two forms of operation have been collapsed together and "Battey's operation" has frequently been constructed as the climactic endpoint of the ovariectomy narrative rather than an alternative to the original operation.⁶⁶ It is these excesses of ovarian surgery that have come to be seen as unveiling the true meaning of ovariectomy, that is, the use of experimental surgery as a means of controlling the behavior of women. In truth, the difference between these two practices remains just as debatable today, and their meaning just as unstable.

Such deviations in practice raise significant methodological questions; if surgical innovation often occurs in the manner suggested above, then one might question the usefulness altogether of constructing the history of a surgical innovation. To do so, after all, one tends to rely on a certain amount of stability to the innovation at hand in order to produce a narrative. And yet the history of ovariectomy draws our attention to the chronic instability of that procedure, linguistically and conceptually, and it is unlikely to be the only operation to reveal such a history. I would argue, however, that this does not negate the usefulness of "innovation" as an analytical category, as long as one does not premise it on a simplistic understanding of innovations as discrete entities that can be neatly categorized as successes or failures. Indeed it is through using the framework of innovation that a much richer history of nineteenth-century ovarian surgery is revealed, bringing into view the wide deviation in theory and practice that lingered under that one powerful term—"ovariectomy."

Notes

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1. John Halliday Croom, "Obstetrics," *Lancet* 148 (1896): 343.
2. Robert Liston, *Elements of Surgery* (London: Longman, 1835), 54.
3. Thomas Spencer Wells, "The Address in Surgery," *Lancet* 110 (1877): 193.
4. Ornella Moscucci, *The Science of Woman: Gynaecology and Gender in England, 1800–1929* (Cambridge: Cambridge University Press, 1990). For an account of ovariectomy in America, see Regina Morantz-Sanchez, *Conduct Unbecoming a Woman: Medicine on Trial in Turn-of-the-Century Brooklyn* (Oxford: Oxford University Press, 1999).
5. One of the most outspoken opponents of ovarian surgery in midcentury London was the surgeon Robert Liston. Liston evocatively described those women who had died undergoing the procedure as "sacrificed to a desire for false reputation." This idea of sacrifice, particularly of women, was powerful, conjuring up images of slavishness to unthinking ritual and of unnecessary death, quite contrary to any notion of progress. Liston, *Elements of Surgery*, 54.
6. This is not to detract from the value of Moscucci's and Morantz-Sanchez's nuanced accounts. Both authors deny that the operation can be viewed merely as an exercise in misogyny. Nonetheless their work is firmly situated within gender history.
7. Many eighteenth-century anatomists and practitioners noted the frequency with which ovaries were found to be diseased. In fact so often were pathological changes discovered upon dissection that it was sometimes difficult to establish what exactly should be considered a normal ovary. Jean Astruc, *A Treatise on the Diseases of Women*, vol. 3 (London: J. Nourse, 1767), 14. See also Sally Frampton, "The Debris of Life: Diseased Ovaries in Eighteenth-Century Medicine," in *The Secrets of Generation: Reproduction in the Long Eighteenth Century*, ed. Raymond Stephanson and Darren N. Wagner (Toronto: University of Toronto Press, 2015), 344–63.
8. The difficulty in treating dropsies of the ovary was often attributed to the tumors being "encysted," meaning they were made up of small sacs in which fluid was trapped. This rendered the diuretic effect of digitalis ineffective.
9. William Withering, *An Account of the Foxglove and Some of Its Medical Uses* (Birmingham: Swinney, 1785), 203.
10. William Hunter, "The History of Emphysema," *Medical Observations and Inquiries* 2 (1758): 41–45.
11. Jean Delaporte was probably the first surgeon to publicly express his desire to see the establishment of a more radical operation that involved removing the whole ovary. Jean Delaporte, "Hydropsie enkistée de l'ovaire attaquée par incision," *Mémoires de l'Académie Royale de Chirurgie* 2 (1753): 452–55.
12. McDowell published on the operation only in 1817. By then he had removed diseased ovaries from three women, all of whom had survived. Ephraim McDowell, "Three Cases of Extirpation of Diseased Ovaria," *Eclectic Repertory and Analytical Review* 7 (1817): 242–45.
13. In the eighteenth century the womb and the spleen were also mooted as possible targets for extirpation. In Britain in the 1820s these organs, along with the kidney and the bladder, would be subject to animal experimentation by the physician James Blundell, who concluded that the ovaries, spleen, and parts of the bladder might all

be feasibly removed, and that “moderate openings into the human peritoneum will not necessarily, or even generally, prove fatal from inflammation.” James Blundell, “On the Surgery of the Abdomen,” *Lancet* 12 (1829): 355.

14. In 1825 the Scottish surgeon John Lizars had published four cases where he had attempted the radical procedure. Lizars’s results were not good: of his four cases, one died from peritoneal inflammation, another was discovered to have been misdiagnosed, with no tumor to be found upon opening the abdomen, and in a third the operation had to be abandoned because of extensive adhesions. A fourth woman was operated on successfully. John Lizars, *Observations on Extraction of Diseased Ovaria* (Edinburgh: Daniel Lizars, 1825). In the late 1830s a number of provincial surgeons performed the operation with rather more success, and shortly after a small number of London surgeons also took up its practice.

15. Sally Frampton, “Patents, Priority Disputes and the Value of Credit: Towards a History (and Pre-History) of Intellectual Property in Medicine,” *Medical History* 55 (2011): 322.

16. Thomas Radford, “Two Cases of Impracticable Labour Arising from Malacosteon of the Pelvis, in Which the Caesarean Operation Was Performed,” *Edinburgh Medical and Surgical Journal* 55 (1841): 71.

17. Charles Clay, *Cases of Peritoneal Section for the Extirpation of Diseased Ovaria* (London: Munro & Congreve, 1842), 4.

18. Clay, *Cases of Peritoneal Section*, 18.

19. William Jeaffreson, “Mr Jeaffreson’s Operation for Ovarian Dropsy,” *Lancet* 41 (1843): 217.

20. Thomas Schlich, *Surgery, Science and Industry: A Revolution in Fracture Care, 1950s–1980s* (Basingstoke, England: Palgrave Macmillan, 2002), 133.

21. Charles Clay, “Ovariectomy,” *Medical Times* 9 (1843): 4–5.

22. Fleetwood Churchill, “Ovariectomy,” *Medico-Chirurgical Review* 82 (1844): 528. For more on the “avalanche of printed numbers” in nineteenth-century culture, see Ian Hacking, *The Taming of Chance* (Cambridge: Cambridge University Press, 1990).

23. “Royal Medical and Chirurgical Society, November 13th, 1850,” *Lancet* 56 (1850): 585–86.

24. This was the contention of William Lawrence, one of London’s most eminent surgeons, who was vehemently opposed to ovariectomy. “Royal Medical and Chirurgical Society,” 586.

25. Thomas Keith, “Fifty-One Cases of Ovariectomy,” *Lancet* 90 (1867): 291.

26. The phrase “capital operation” was frequently used in the nineteenth century to describe those major procedures that carried a substantial risk to the life of the patient. Aside from ovariectomy, in the mid-decades this generally included lithotomy, ligation of aneurysms, amputation at the thigh, and hernia operations. For more on British surgery in the early to mid-nineteenth century, see Peter Stanley, *For Fear of Pain: British Surgery, 1790–1850* (New York: Penguin, 2003).

27. Thomas Spencer Wells, *Diseases of the Ovaries: Their Diagnosis and Treatment*, vol. 1 (London: John Churchill & Sons, 1865).

28. William P. Swain, “Transactions of Branches: On Recent Improvements in Surgery,” *British Medical Journal* 2 (1866): 304.

29. Benoît Godin, “Social Innovation: Utopias of Innovation from c. 1830 to the Present,” Project on the Intellectual History of Innovation, Working Paper no.

11, INRS, Montreal, 2012, 8, http://www.csiic.ca/PDF/SocialInnovation_2012.pdf (accessed October 15, 2014).

30. Christine MacLeod, *Heroes of Invention: Technology, Liberalism and British Identity: 1750–1914* (Cambridge: Cambridge University Press, 2007).

31. Charles Clay, “The Ovariectomy Controversy,” *Lancet* 85 (1865): 380.

32. Schlich, *Surgery, Science and Industry*, 67–8.

33. Charles Clay, “On Ovariectomy and Ovariectomists,” *Lancet* 85 (1865): 227.

34. “Mr. Wells’s Address in Surgery,” *Lancet* 110, no. 2816 (1877): 249.

35. Lawrence D. Longo, “The Rise and Fall of Battey’s Operation: A Fashion in Surgery,” *Bulletin of the History of Medicine* 53 (1979): 244–67; Morantz-Sanchez, *Conduct Unbecoming a Woman*, 94–100.

36. Longo, “Rise and Fall of Battey’s Operation,” 245.

37. *Ibid.*, 247–48.

38. *Ibid.*, 249–50.

39. As quoted in *ibid.*, 249.

40. George J. Engelmann, “Battey’s Operation: A Brief Summary of Results Achieved in the Forty-Seven Cases So Far Reported,” *The Saint Louis Medical and Surgical Journal* 35 (1878): 101–2.

41. Durrenda Ojanuga, “The Medical Ethics of the ‘Father of Gynaecology,’ Dr. J. Marion Sims,” *Journal of Medical Ethics* 19 (1993): 28–31; L. Lewis Wall, “The Medical Ethics of Dr. J. Marion Sims: A Fresh Look at the Historical Record,” *Journal of Medical Ethics* 32 (2006): 346.

42. “Obituary: J. Marion Sims, M.D.,” *British Medical Journal* 2 (1883): 1001.

43. Sims even highlighted this contradiction in Battey’s practice. James Marion Sims, “Remarks on Battey’s Operation,” *British Medical Journal* 2 (1877): 916.

44. *Ibid.*

45. *Ibid.*, 918.

46. Edmund Randolph Peaslee, *Ovarian Tumors: Their Pathology, Diagnosis and Treatment* (New York: D. Appleton, 1872), 225.

47. Lawson Tait, “Removal of the Uterine Appendages,” *British Medical Journal* 2 (1882): 153. For more on Tait’s operation, see Morantz-Sanchez, *Conduct Unbecoming a Woman*, 100.

48. Peaslee, *Ovarian Tumors*, 249–50.

49. Alexander Russell Simpson, “A History of Double Oophorectomy, or Battey’s Operation: With Remarks,” *British Medical Journal* 1 (1879): 763.

50. Lawson Tait, “An Account of Two Hundred and Eight Consecutive Cases of Abdominal Section Performed between Nov. 1st, 1881 and December 31st, 1882,” *British Medical Journal* 1 (1883): 300–303, see 300; Lawson Tait, “General Summary of Conclusions from Second Series of One Thousand Consecutive Cases of Abdominal Section,” *British Medical Journal* 2 (1888): 1096–97.

51. Moscucci, *Science of Woman*, 148–49.

52. Thomas Spencer Wells, *Modern Abdominal Surgery: The Bradshaw Lecture Delivered at the Royal College of Surgeons of England; With an Appendix on the Castration of Women* (London: J. A. Churchill, 1891), 35.

53. *Ibid.*, 42.

54. *Ibid.*, 43.

55. *Ibid.*, 36.

56. Stuart Jones, "Review of *The Invention of Altruism*, by Thomas Dixon," *Reviews in History*, April 2009, <http://www.history.ac.uk/reviews/review/757>.

57. The Royal College of Physicians of London, *Nomenclature of Diseases* (London: Printed for H.M.S.O. by Harrison and Sons, 1885), 273.

58. Tait, "Account of Two Hundred and Eight Consecutive Cases," 301.

59. Charles Jennings, "Nomenclature for Operations upon the Ovaries," *British Medical Journal* 2 (1886): 49.

60. "F.R.C.S.," "Nomenclature for Operations upon the Ovary," *British Medical Journal* 2 (1886): 187.

61. *Ibid.*, 187.

62. "H.E.M.," "Medical Nomenclature," *Canadian Medical Association Journal* 43 (1940): 597.

63. One such recent example is B. Chakrabarti and N. Mondal, "Adolescent Ovarian Malignancy," *International Journal of Gynecology and Obstetrics* 107, supplement 2 (2009): S138.

64. In regard to medical innovation, John Pickstone wrote: "We no longer have the high Victorian confidence that change is for the best." John V. Pickstone, "Introduction," in *Medical Innovations in Historical Perspective*, ed. John V. Pickstone (Basingstoke, England: Macmillan, 1992), 1.

65. Peter Angelos, "The Art of Medicine: The Ethical Challenges of Surgical Innovation for Patient Care," *Lancet* 376 (2010): 1046. See also Schlich, *Surgery, Science and Industry*, 133.

66. A key example would be Thomas Laqueur's *Making Sex*. In it, Laqueur argues that ovariectomy was "the clearest case in which cultural assumptions fuelled a research tradition whose results in turn confirmed those views." Like many other historians, it is the sporadic use of ovarian surgery to treat mental conditions in the latter part of the century that seems to guide his analysis of ovariectomy as a whole. Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, MA: Harvard University Press, 1990), 175.