CHAPTER 2

Pathologies, Actions, Ideas

We know what a masquerade all development is, and what effective shapes may be disguised in helpless embryos. – In fact, the world is full of hopeful analogies and handsome dubious eggs called possibilities.
George Eliot, *Middlemarch*, 1874.[1]

Heroes and Villains

On a wintery day in December 1809, a forty-six-year-old woman, Jane Todd Crawford, arrived in Danville, Kentucky, after completing an arduous sixty-mile journey on horseback over rough terrain. Crawford was there to meet with a surgeon, Ephraim McDowell. For some time, Crawford had believed she was pregnant and in recent weeks had grown so large that local doctors in her hometown of Greensburg had believed that childbirth was imminent. Ephraim McDowell had been called in to help deliver the child, but on examining the patient McDowell made a surprising discovery. Crawford was not pregnant but suffering from a rapidly growing ovarian tumour. Crawford's case immediately became one of grave danger, 'Having never seen so large a substance extracted, nor heard of an attempt, or success attending any operation, such as this required, I gave the unhappy woman information of her dangerous situation' McDowell later reported.[2] Ovarian tumours were notoriously difficult to treat. Palliative procedures could bring temporary relief, but the tumours rarely responded to any medical therapeutics that might effect

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permanent change. Left untreated the growths could grow so large that they filled up the abdominal cavity, crushing the other organs. For most women, an ovarian tumour was a death sentence.

With few options available to them, McDowell and Crawford agreed to try something radical. If Crawford would make the journey to Danville, McDowell would try and remove the diseased ovary. On Christmas day, the operation took place. Despite McDowell's graphic description of the operation, at one point Crawford's intestines 'rushed out upon the table', he managed to remove her fifteen-pound tumour. The operation was, to the surprise of many, a success. Crawford recovered from the operation in a matter of days and lived for another thirty-two years. It appeared to be an unprecedented act in the history of surgery. When McDowell eventually published details of the case in 1817, along with those of two more successful procedures he had performed, the results were so extraordinary that some fellow doctors cast doubt upon their authenticity.[3]

As a consequence of his operation on Crawford, Ephraim McDowell has had a sustained grip on the title of 'father of abdominal surgery'. McDowell fitted the mould of the trailblazing surgeon, using ingenuity and self-reliance to create a new operation. Similarly, Crawford's courage has lent itself to a narrative of fortitude and bravery. Early histories of the operation reinforced this idea. Biographies of McDowell, published in 1891 and 1920, highlighted McDowell's unique role in the operation's development.[4] They emphasised the importance of his rural location, on the 'edge of civilisation' as one put it, and painted a picture of the Kentucky surgeon as the embodiment of the pioneering American spirit.[5] Indeed, McDowell's operation on Crawford would come to hold great significance for later surgeons, not only as supporting evidence of America's role in the operation, but in its identification by many in the medical profession as the effective beginning point of ovariotomy in the western world. But such narratives belie a more intricate history both to the story of Ephraim McDowell's work and of the beginnings of ovarian surgery. The idealistic portrayal of McDowell and Crawford's harmonious relationship, for example, as a 'a daring man and courageous woman coming together to settle a problem',[6] must be contextualised by McDowell's subsequent operations to extract ovaries, the next four of which were undertaken upon black women, all almost certainly enslaved, in cases in which consent for the patients to undergo surgery lay not with

the women but with their masters.[7] Moreover, the contemporary impact of McDowell's work was hardly one of jubilant success: it would be eight years until McDowell published a report of the case and the reception his work received was lukewarm rather than triumphant.

The story of McDowell and Crawford, for all its drama, tells us relatively little about the genesis of the operation. Broad cultural shifts have been suggested by several historians as precipitating interest in removing the ovaries. But there have been few detailed explorations as to why ovarian surgery was taken up in advance of other forms of pelvic and abdominal surgery. The conceptualisation of the operation as innately Victorian has been both the cause and effect of the scant attention paid to its eighteenth- and early nineteenth-century roots. The analyses of Barbara Ehrenreich and Deirdre English, Thomas Laqueur and others have largely focused on the operation as it was in the last decades of the nineteenth century and, in particular, the use of the operation to treat mental conditions, shaping ovarian surgery into a motif for Victorian understandings of female pathology and sexuality and its operators into semi-villainous characters, emblematic of the medical profession's disdainful attitude towards women during that time. In fact, ovarian surgery had roots that stretched far back beyond the 1800s. This chapter explores the confluence of physiological and pathological ideas which led practitioners to believe that the removal of the ovaries was a viable operation. What made the diseased ovary a distinctly surgical object? Was such an idea even new? And if so, did a new idea necessarily give surgeons' licence to initiate novel practices? Or did novel practices foreground a more coherent pathological theory? A simplistic conceptualisation of surgical innovation might suggest that a group of authoritative practitioners encountered a problem that needed to be solved, and that this necessarily lent itself to action. However, any kind of linear model of innovation is complicated by ovarian surgery where, as shall be explored, a large chasm existed between the idea of performing the procedure and the first attempts at doing so.

Locating the Pathological Ovary in Early Modern Medicine

Towards the end of the seventeenth century, the 'testicles' of females, previously little distinguished from their male counterparts, began to be understood in a fundamentally different way. In 1651, the English physician William Harvey published *De Generatione Animalium* in which

he asserted his doctrine of *ex ovo omnia*: that all animals, from the lowliest creature to humankind, emerged from the *ovum*, minuscule eggs, invisible to the eye. In the 1660s and 1670s, physicians across Europe began to affirm experimentally that the female testicles were egg-producing organs and the more congruous term 'ovary' was increasingly seen fit to describe them.[8] The identification of the ovary laid the foundations for two competing theories of generation that predominated in the 1700s: preformation, which characterised the egg as the container of all future pre-formed life, merely activated by the male seed, and epigenesis, which posited that new organisms developed gradually following the sexual union of the male and female.[9] The eighteenth century saw a burgeoning research culture which centred around the female reproductive system.[10] The shift in the organ's identity from female testicle to that of the ovary, and the subsequent investigations it galvanised, was, as Thomas Laqueur has argued, a decisive moment in the shift from the 'one-sex' to 'two-sex' model, as male and female bodies became increasingly distinguished from one another during the late eighteenth and nineteenth centuries. This gave forth to understandings that women's reproductive organs were intimately connected to the production of specifically feminine bodily and behavioural characteristics. The anatomy of the male and female reproductive systems became 'the foundation of incommensurable difference' between men and women.[11]

The discovery of egg production meant it had come to be understood that the ovaries played a role in reproduction, but the intricacies of the organ's functions and its exact connection to the generative process remained unclear. The womb continued to dominate vernacular as well as medical understandings of women's reproductive functions, and its diseases were a common site of medical intervention.[12] The ovaries on the other hand were, according to Matthew Baillie, a physician and Britain's foremost morbid anatomist in the eighteenth century, 'a part of the animal oeconomy which seems to have been hitherto involved in a considerable degree of obscurity'.[13] The 'obscurity' he referred to reflected not only the mystery which still surrounded the organ's physiology but also its diseases, which were thought to occur with alarming frequency. Indeed, so often were the ovaries found to contain pathological changes following patients' deaths and the subsequent dissection of their bodies, that practitioners found it difficult to establish what exactly could be considered a

normal ovary: 'the change of condition, which these disorders produce in the ovaria, has often deceived anatomists; and made them mistake the true structure of these parts' wrote the French physician Jean Astruc, whose numerous textbooks were frequently translated into English and had a considerable impact on practitioners across the Channel.[14]

One of the most perplexing disorders of the ovary, where physiology and pathology converged, was tumours which were found to contain tissues like hair, teeth and bone (a condition known today as a dermoid cyst). The disease fascinated medical men. It was clear evidence of pathological behaviour in the ovary, but how closely aligned the disease was with embryonic development was a source of confusion and generated a multitude of theories over the years. One surgeon conjectured that the tooth he had discovered in the ovary of one of his deceased patients could not possibly have been formed within the organ and instead speculated that it had been swallowed and had subsequently perforated the ovary.[15] Jean Astruc believed the tumours to be putrefying embryos which had erroneously embedded themselves and then died in the ovary.[16] Others claimed that in some cases their patients were virgins, meaning that the condition was unlikely to be connected to pregnancy.[17] That these strange masses defied explanation by prevailing theories of generation did not go unnoticed by medical men. The eminent French natural philosopher Georges Louis Leclerc, Comte de Buffon, rejected the idea that teeth, bones and hair had even ever been found within the organ. The Irish physician James Cleghorn claimed this to be typical of the general disregard natural philosophers had for medical facts; 'Monsieur le Comte de Buffon, finding it difficult to account for the formation of a foetus in the ovarium, like a true theorist, seems to reject the fact altogether…thinking it of more consequence to establish his own theory than to propagate the knowledge of truth'.[18] When in 1789 Matthew Baillie published a case of one such tumour found in the body of a recently deceased girl, aged twelve or thirteen, and which appeared to definitively show they were not related to pregnancy, his work demonstrated how the everyday experiences of medical practitioners could be put to work in explaining the mysteries of the human body.[19] Andrew Cunningham has characterised the long eighteenth century as a time when 'the generation of humans – or certain aspects of it – became more important for the medical or surgical practitioner than ever before'.[20] The encroachment of male medical practitioners upon the realm of childbirth

gave further impetus to the anatomical investigation of the female reproductive system. This was borne out in the works produced by practitioners like William Smellie and William Hunter, both of whom made their names and fortunes in London as eminent obstetricians. Hunter's *Anatomia Uteri Humani Gravidi Tabulis Illustrata* (1774) especially, provided novel knowledge about the process of embryonic development. However, obstetrical texts were not usually written with an eye to explicitly supporting one theory of generation or another, and most obstetricians were primarily concerned with producing pedagogical texts for fellow man-midwives or expensive illustrated volumes for their patrons.

During the eighteenth century, the ovary was considered both physiologically and pathologically complex, making it an object of curiosity in the burgeoning field of morbid anatomy. Understandings about the organ's generative abilities increasingly relied on the findings of medical practitioners, whose anatomical research helped uncover its structure and function. Anatomists like Matthew Baillie generated interest in an organ that appeared to be frequently altered by disease. Assembling therapeutic tools based on such anatomical findings was, however, to prove a more challenging prospect, as practitioners looked to find a way to effectively treat ovarian disease.

The Dropsical Patient

Growing interest in the ovary's generative function was central to discussions of how its diseases developed. But for the patient afflicted with ovarian disease in the eighteenth century, changing understandings of the organ's physiology and pathology would have had little impact upon their sufferings. Buried deep within the peritoneum, the ovary was quite literally inaccessible. A slow and painless progression usually characterised ovarian disease in its early stages, making it difficult to determine its existence until it had advanced to a point where it had begun to endanger the patient's life. Discussions of its treatment were often suffused with a sense of hopelessness.[21]

Despite this, most practitioners were cognisant that ovarian conditions did occur frequently among women and one disease in particular struck with alarming regularity: dropsy.[22] Perhaps because by the mid-nineteenth century the term 'dropsy' had become largely obsolete in medical terminology, its role in the development of ovarian surgery has been virtually ignored. Yet the belief among doctors that the ovary was

highly susceptible to dropsy was significant in conceptions of its pathology. Dropsy was a generic, expansive disease category, used to refer to swellings containing water, serum or air found throughout the body, usually (but not always) presenting alongside other symptoms such as retention of urine and thirst. It was generally viewed as a disease caused by some kind of constitutional imbalance.[23] The frequency with which practitioners encountered the condition in their patients meant that a detailed nosology of the disease had been in use since ancient times.[24] The disease was usually grouped into three categories: ascites (watery swelling of the belly), tympanites (windy swelling of the belly) and anasarca (swelling throughout the body).[25] During the early modern period, classification became increasingly sophisticated. Conditions like hydrocephalus (fluid in the cranium), hydrothorax (fluid in the chest) and dropsies of the womb, testicle and ovary were also referenced as different forms of the condition. Dropsy was a disease that cut across the social spectrum, affecting the young and the old, the rich and the poor. In London alone, in the late eighteenth century, it was responsible for hundreds of deaths every year.[26]

Historians Wendy Churchill and Richard Gooding have both argued that contemporary medical practitioners believed dropsy disproportionately affected women. Scottish physician Donald Monro certainly thought this was the case, writing in 1756, that 'women being more subject than men to stoppage of the natural excretions, and being also of a weaker frame, are more frequently attacked by dropsies'.[27] Reflecting the continued role of humoural theory as the explanatory mode for bodily disorders, others agreed that it was women's 'wateriness' that seemed to make them more prone to the condition. While dropsy might be thought more likely to attack women, its gendering was, however, complex. Men were by no means considered safe from the disease. The oft-made assumption that dropsy could be caused by overindulgence or excessive alcohol, which could cause an imbalance of the humours, meant it could just as easily be associated with men.[28]

Misinterpretation of the disease in both men and women was common. Dropsy was often mistaken for corpulence, something complicated by the fact that fatness was sometimes implicated as a cause of the disease too.[29] For dropsical women, misdiagnosis could have serious consequences. As would be the case with Jane Todd Crawford, patients and their practitioners very often mistook dropsy for pregnancy because of the swelling to the abdomen it caused (see Fig. 2.1).

Fig. 2.1 Illustration of a woman with an abdominal dropsy taken from Jean-Louis-Marc Alibert's *Nosologie Naturelle* (1817). Her abdomen is visibly swollen with fluid, showing how the condition could easily create the illusion of pregnancy. Her swollen legs and gaunt face were other common symptoms of dropsy (*Credit* Wellcome Collection. CC BY)

Pregnancy was still shrouded in uncertainty, there being few reliable indicators as to whether a woman was pregnant or not, especially in the early months before the baby could be felt.[30] For some dropsical women, it was only when their belly continued to grow beyond the usual nine months that disease was accepted as a more likely scenario than them carrying a child.[31] The rapid growth of ovarian dropsy once it reached an advanced stage was an unnerving aspect to the disease. Dropsical ovaries could grow so big that practitioners often labelled them as 'monstrous'. The Norwich surgeon Philip Meadows Martineau reported in 1784 the case of a local woman, Sarah Kippus, whose belly had grown so large that her face had almost become obscured by it. Martineau described her appearance as 'truly deplorable, not to say shocking'.[32]

The confusion between pregnancy and dropsy left women—and especially, younger, unmarried women—vulnerable. The spectre of illegitimacy was raised by their swollen bellies which were open to scrutiny from the local community. In 1706, the Plymouth surgeon James Yonge reported one such case to the Royal Society:

> A Virgin of thirty fell into a periodical fever and afterward a total suppression of her *Menstrua*; which soon followed with a pain and tumour on the right side of her belly, which grew and encreased…till it became bigger and harder than that of a woman in her last month. When it had grown a full year, it began to soften, and then the censorious people who suspected her thought her in a dropsie.[33]

Even if the possibility of pregnancy could be disproved, the effects of the disease on one's quality of life were significant. On top of the stigma of living with a condition that observers found disturbing to look at, physically, the toll of living with a large ovarian dropsy was substantial. It could lead to breathing difficulties, trouble walking and an array of other symptoms. Practitioners noted the effect this could have on those women who had laborious and physically demanding occupations and whose livelihood depended on their health.[34]

Ovarian dropsy was set apart from other forms of dropsy in three significant ways. First, as described above, ovarian dropsy was generally symptomless until the disease reached an advanced state. Its insidious growth meant that sufferers of the condition often did not seek

medical attention until their abdomen was noticeably swollen. Second, when the dropsical swelling occurred, it was often in an encysted form—when multiple sacs of fluid formed within a larger general swelling—which added complexity to the disease site, as fluid was effectively trapped in the smaller cysts. 'The ovarium dropsy being encysted, will be found to require a considerable deviation from the general mode' argued one practitioner in 1796.[35] Third, in contrast to most other dropsies, which were usually viewed as symptoms of underlying disease elsewhere in the body, it was understood to be localised, a sign of the organ's structure gone awry rather than a constitutional disorder that could be rectified by restoring humoural balance. The idiosyncrasies of the disease gave it a prominent place in discussions of potential therapeutics. The usual medical modes of treatment for dropsy, which lay in re-establishing the balance of fluids within the body, were rendered ineffective in ovarian forms of the disease.

Most practitioners came to a grim conclusion about the disease: it was simply incurable.[36] This view was endorsed in the 1785 publication *An Account of the Foxglove and some of its Medical Uses* by Birmingham physician William Withering. In what was to become a much admired text, Withering publicised his successful experimentation with the diuretic effect of *Digitalis*, commonly known as the plant foxglove, which, he argued, effectively cured many forms of dropsy. However, he excluded ovarian dropsy from the possibility of cure with this method. Failed attempts at doing so had left him convinced that 'the ovarian dropsy defies the power of medicine'.[37]

Complex in its structure, difficult to diagnose and unamenable to treatments used for other forms of the disease, a diagnosis of ovarian dropsy was a grave event for the sufferer and a hopeless case for the practitioner. A woman might labour under the disease for months, sometimes years, but few would make a full recovery. Most would eventually die from the condition. The relative powerlessness of medicine to treat the disease led some practitioners to look for more radical alternatives.

Removing the Ovaries: A Disembodied Technique

The ineffectiveness of medicine meant that doctors turned to other methods for treating ovarian disease. The operation of paracentesis, commonly known as 'tapping', was one of the more common treatments for dropsies within the abdomen. It was not considered to provide a

permanent cure but was held to be the only treatment which was even slightly effective in palliating ovarian disease. Paracentesis was a procedure that had been in use since ancient times and was relatively simple in its execution: after pressure had been applied to the affected area with bandages or a belt, a trocar was inserted into the abdominal cavity through which fluid was then drained off. It was a common technique, but one where the limitations were clearly perceived. Dropsical swellings would usually begin to refill soon after they had been drained and patients required multiple tappings to keep the growth at bay. The more complex and multi-cysted the swelling was, the more likely it was that a tapping would fail, a single puncture unlikely to cause effective draining in the smaller sacs of fluid. The procedure was fraught with danger, sometimes aggravating the condition and even hastening death. Most advocated performing it only when the pain had become unbearable or the vital organs were impaired. Despite the risks, many still sought repeated tappings to palliate their symptoms. Sarah Kippus, described above, was one such example. A pauper woman, her case was extraordinary for the length of time she lived with her condition; she was tapped eighty times during a period of twenty-three years, with 6631 pints of fluid altogether drawn from her dropsical ovary before she died of the disease in 1783. Evidently, the procedure became an established part of her life. Philip Meadows Martineau noted that the tapping would generally occur on a Sunday so that her neighbours could assist her. So much was it a part of her routine, he claimed, that she 'seldom regarded the operation'.[38] Throughout the late eighteenth and early nineteenth centuries, the quest to find other cures for the disease continued, with everything from douches and electricity to diuretics, mercury and iodine injections being advocated for its treatment, none of which would, however, earn the confidence of medical practitioners *en masse*.

The ineffectiveness of established treatments did not mean an inevitable path to surgery. For any disease, recourse to surgery remained undesirable. Operations were, as surgeon John Hunter, brother of William, liked to tell his students, 'the defect of surgery',[39] a necessary evil only to be performed when all else had failed. Given the common opinion that surgeons were little more than bloodthirsty and untrustworthy knife-wielders, Hunter's words of caution are not surprising.[40] Entering the abdomen was fraught with dangers to both patients' lives and practitioners' reputations.

And yet, fostered by the experimental anatomy taking hold among French and British practitioners in the eighteenth century, discussion

was turning to the possibility of surgically removing internal organs. The gradual shift occurring from the traditional frameworks of humouralism and nervous pathology, which implicated the entire body, and its humoural or nervous balance, in the cause of illness, towards the idea that local tissues and organs acted as the seat of disease, was embodied within these debates. Initially, the focus was not so much upon the technical feasibility of doing so, but upon the impact of removing organs, or parts of them, upon the rest of the body. What organs was it possible for humans to live without? What would be the effect of their removal? In the early eighteenth century, attention had focused on the spleen. The exact function of the organ had long been a subject of debate among medical men. Indeed, the possibility that the spleen in fact played no functional role in the body's workings was raised. This idea was pursued by the English physician Richard Blackmore. Blackmore claimed that ancient medical authorities had, like him, viewed the spleen to lack function and to possibly even be a noxious influence on the body because of its production of black bile.[41] Joining theory with surgical experimentation, Blackmore cited the work of the seventeenth-century anatomist Marcello Malpighi who claimed to have successfully removed the spleen from a number of dogs, all of whom had survived the procedure without long-term effect.[42] As Blackmore himself acknowledged, such a view, while hardly novel, was potentially controversial, implying as it did that the organ was 'made in vain; which is to affirm, that an Intelligent and infinite wise Cause, may act without Design, and for no End'.[43] This challenged not just ingrained medical ideas of constitution and humoural balance but the Galenic idea of teleological anatomy, that every part of the body had a specific purpose, which was part of the theological concept of a designing, purposeful deity.[44]

Across the Channel, some years later, similar questions were being asked with respect to the womb. In the early 1780s, an intriguing discussion took place among members of the Académie Royale de Chirurgie in Paris. The city still led the way in surgery and obstetrics during the middle decades of the eighteenth century, and the Académie was one of a number of medical societies in operation during the Ancien Régime which cultivated a thriving culture of correspondence among its members.[45] A surgeon named Lassort appealed to his peers for responses to a question that he had become greatly interested in: namely, could a woman, once she had had children, live without her womb?

The question generated numerous replies from surgeons and *accoucheurs*, many of whom brought forward cases where extirpation of the womb had been attempted, or where in hindsight, they believed removing the organ might have saved a life. As with the spleen, the possibility of removing the womb was not an entirely new idea: the operation had once been performed by sixteenth-century surgeon Ambroise Paré who had taken a diseased mass from a woman that had later been identified as being formed from one the ovaries and the womb. Even though Paré's removal of the womb had been accidental rather than intentional, this gave the operation some historical foundation.[46] The operation Paré performed joined the other occasional reports of abdominal surgery in Europe which were scattered through medical publications in the seventeenth and eighteenth centuries.[47]

Most practitioners who joined the dialogue that Lassort had initiated believed that removal of the womb was possible, and that a woman without a womb could go on to live a healthy life. The relative expendability of the womb was emphasised, especially so after child-bearing had been completed. The womb's function was regarded as temporary; after the climacteric, the organ became useless. The discussion facilitated by the Académie provides an interesting counterpoint to arguments put forth by historians as to why the female reproductive organs became the focus of surgery. 'It is no historical accident that ovariotomy was the first major procedure in abdominal surgery to be developed and accepted' wrote Jane Eliot Sewell, 'unlike appendectomy or liver and kidney operations, which might objectively have been equally valid candidates for innovation, ovariotomy involved women's reproductive organs and these organs were bequeathed a larger-than-life status in society'.[48] Surgeons' discussions tell another story. The female reproductive organs were vital to procreation. But unlike the brain, heart or liver, most suspected they were not vital to the maintenance of life. As such, it was not so much the reproductive organs' 'larger-than-life status' that generated conversation about their possible removal, but rather their relative lack of contribution to the bodily system, particularly with the course of age. The same was thought true of men too. Male castration was not common, but it was practised as a last resort in cases of cancer.[49] This proved to practitioners that a man could survive without his generative organs, and by analogy, it seemed possible a woman could survive without hers. The crucial difference between the sexes was not so much any vital difference in their nature but that removing the female generative organs meant entering

the peritoneum and thus entailed a considerably more complex and dangerous surgical operation.

It was in this context that eighteenth-century practitioners began to discuss the removal of the ovaries in those suffering from dropsy in the organ. The disease seemed to suggest itself to surgery. Visibility is at the crux of surgical encounters and the huge sizes that dropsical ovaries eventually accrued made it a striking, highly conspicuous disease that straddled the line between the internal and external and, consequently, the traditional—if not always observed—boundaries between surgery and physic. Because of this, dropsical ovaries challenged conceptual and professional boundaries. They affected an internal organ—the domain of the physician—but they were highly visible, like external tumours, and thus conceivably in the domain of the surgeon too. In 1753, a group of essays on encysted dropsies of the abdomen were published in the prestigious *Mémoires de l'Académie Royale de Chirurgie* in which the possibility of removing ovarian tumours was discussed in detail. Only five volumes of the *Mémoires* were published during the eighteenth century and those cases taken from the discussions of the Académie tended to be those 'worthy of becoming part of surgical lore'.[50] Thus, the collection of essays, entitled 'Several Accounts and Observations of the Encysted Dropsy and Schirrhus Ovary', reflected a concerted effort on the part of the Académie to focus attention upon the subject. The accounts included remarks from the eminent lithotomist Sauveur-François Morand, as well as surgeon to the Hôpital de la Charité, Henri le Dran. Like those interested in the possibility of removing the spleen and womb, Morand looked back to the ancient world for precedents. He alluded to a manuscript by the Greek author Hesychius (c. fifth century CE) in which it was suggested that women of the ancient Lydian community were surgically castrated.[51] Accounts like this provided an historical basis to any possible operation, helping to prevent it being labelled a dangerous and unnecessary novelty.

The most radical essay, however, came from a rather obscure figure, the surgeon Jean Delaporte.[52] Recounting a case of death from ovarian dropsy in his care, Delaporte was the first surgeon to publicly express his desire for a more radical operation. Delaporte affirmed his belief that the diseased ovary was not the result of a constitutional disorder but *le foyer de maladie* ('the seat of the disease').[53] The swelling took over the entire ovary until disease and organ were interchangeable. The ovary was

not just the source of the disease, it *was* the disease and could only be cured, Delaporte believed, by the removal of the organ in its entirety. In his concluding comments, Morand praised Delaporte, imploring his colleagues to celebrate the surgeon's bravery in becoming the first modern practitioner to have raised the possibility of removing the diseased ovary.[54] Over the following decades, dozens of letters and reports concerning cases of ovarian dropsy were sent to the Académie, many of which conveyed the frustration of practitioners from across the country as to the ineffectiveness of current treatments. Some began to express a wish that advanced ovarian tumours be treated by major surgery and framed it as a matter of professional pride: 'surgery of our century has yet to fully triumph over this common and cruel disease' wrote one surgeon to the Académie in 1763.[55]

It was almost certainly the publication of Delaporte's essay which compelled William Hunter to bring the subject to British practitioners' attention in 1753 in an essay for the journal *Medical Observations and Inquiries*. At first, Hunter seemed to suggest the impracticality of the operation. 'It has been proposed by modern surgeons, deservedly of the first reputation, to attempt a radical cure by incision and suppuration, or by excision of the cyst' Hunter wrote, 'I am of opinion, that excision can hardly be attempted'.[56] Thus, Hunter appeared to be distancing himself from Delaporte, Le Dran and others. However, his succeeding comments left open the possibility that a radical operation might just work, if the circumstances were right:

> If it be proposed indeed to make such a wound in the belly, as will admit only two fingers or so, and then to tap the bag, and draw it out, so as to bring the root or the pedicle close to the wound of the belly, that the surgeon may cut it without introducing his hand; surely; in a case otherwise so desperate, it might be advisable to do it, could we beforehand know that the circumstances would admit such a treatment.[57]

Hunter, like Delaporte, raised the possibility of radical excision. And yet neither attempted the operation; nor did William Hunter's brother John, perhaps even more notable given John Hunter's reputation as a daring surgeon and progressive thinker. John certainly encountered the disease many times—his casebooks recorded numerous patients suspected of having the condition—and in 1785, he openly discussed the possibility of a more radical operation, decreeing that 'there was no reason why, when the disease can be ascertained in an early stage, we should

not make an opening into the abdomen and extract the cyst itself'.[58] But John Hunter's conjecture similarly laid open only the theoretical possibility of surgery and he did not make any radical alterations in his own practice.

Indeed, by the end of the eighteenth century, despite the growing discussion around the subject, there had only been two cases made public in Britain involving the removal of an ovarian tumour. In 1724, the Scottish practitioner Robert Houstoun reported in the *Philosophical Transactions of the Royal Society* that in 1701 he had made an incision of about four inches into the abdomen of fifty-eight-year-old Margaret Millar, who was labouring under a 'monstrous' tumour.[59] Urged by the desperate woman to do something for her pain, Houstoun had made an incision in her belly and managed to remove large parts of a distended mass and some gelatinous substance through the incision. Millar recovered, apparently relieved of her pain. Retrospectively, a number of Victorian surgeons, most notably Robert Lawson Tait, would resurrect the case to argue Houstoun was the original pioneer of ovariotomy.[60] However, there is no evidence of either Hunter or any of the French surgeons referencing the Houstoun case, which appeared to have had relatively little contemporary impact, probably because Houstoun did not intend to remove the ovary and had not taken it away in its entirety.

The second case was reported in 1775 by St. Bartholomew's Hospital surgeon Percivall Pott. Pott had removed both ovaries from a twenty-three-year-old woman, although he only recognised them to be the ovaries upon removing them, the diseased organs having herniated and passed through the abdominal wall. Pott himself did not use the opportunity to express the significance of this incident to surgery; the case was unusual and the location of the ovaries odd. The operation had not required Pott to open the peritoneal cavity and therefore provided no guidance for treatment of the more typical presentation of ovarian disease a surgeon was likely to encounter.[61] Both Houstoun's and Pott's cases, however, would later be used to support various contentions about the justifiability of ovarian surgery, showing how older cases were often re-visited and re-positioned to suit new narratives of the operation's development.

By the end of the eighteenth century, the operation remained almost entirely hypothetical in Britain—a disembodied technique, without a surgeon willing to perform it or a patient to submit to it. In France, the situation was a little different; the surgeon Jean-Baptiste Laumonier, based at the hospital in Rouen, claimed to have successfully diagnosed and

then removed a diseased ovary from the abdomen of twenty-one-year-old Louise Lagrange in 1782. In another case where surgical innovation aligned dubiously with the treatment of a patient on the periphery of society, Lagrange was a prostitute who had recently given birth, the latter an event which appeared to have precipitated her illness.[62] The significance of Laumonier's procedure to the history of ovariotomy would be minimised by some practitioners in the nineteenth century, in an effort to secure Ephraim McDowell's claim to having performed the first operation. But while the British cases caused only a ripple of interest, the impact of the Laumonier case was rather more significant, in part due to the surgeon's own attempts to press upon his professional colleagues the importance of the operation. Parisian medical societies facilitated debates on new procedures being used in surgery, acting as judge and jury as to the justifiability of their introduction. Laumonier published the Lagrange case in the *Histoire de la Société Royale de Médecine*, claiming that the operation, along with those cases where the womb had been removed, meant that 'there are no organs upon which we might not exert with advantage the various surgical operations'.[63] The Société Royale de Médecine appeared to endorse Laumonier's proposal. A progressive organisation that had a 'brief but vigorous life history in the last years of the Ancien Régime',[64] it praised Laumonier's work and in 1787 even awarded the surgeon a medal for his achievement with the operation.[65] But the optimism around the procedure was short-lived. In 1790, a patient came into Laumonier's care who was initially believed to be pregnant. With no sign of labour after the ninth month, Laumonier suspected a large tumour. Buoyed by his previous success, he proposed to operate, only to be vehemently opposed in his plans by Jean-Antoine Rouelle, chief physician at the hospital. Politics and practice coalesced through their disagreement: the two appear to have been at opposing ends of the political spectrum which one might speculate influenced their opinion on radical innovation in surgery: while Laumonier was an ardent supporter of the Revolution, Rouelle was conservative, a believer in the Ancien Régime.[66] The matter was handed over to the Académie Royale de Chirurgie for deliberation, who eventually backed Rouelle, deeming the risks of the operation and difficulties of clear diagnosis too great to justify its attempt. The patient was not operated upon and died shortly after, the autopsy revealing a large ovarian tumour. Laumonier placed the blame for her demise squarely upon Rouelle.[67] The Académie's decision to back Rouelle had significant consequences;

the institution publicly declared that 'the extirpation of these tumours can be neither advised nor allowed'.[68] The opposition of Europe's most powerful surgical institution to the operation clarified its identification by the surgical establishment as a dangerous and unacceptable novelty.

The relationship between theory and practice in the construction of the 'new' operation for removing diseased ovaries was complex and circular. The metropolitan, professional cultures of London and Paris planted the seed of ovarian surgery's possibility, and the case of Louise Lagrange showed the operation could be successfully performed. But there was yet to be an agreement between practitioners that the procedure should form part of regular surgical practice. Why then discordance between the idea of radical ovarian surgery and the establishment of its regular performance? Delicate negotiation was required for a procedure that signalled fundamental change, not just in technique but in surgical objective. Ovarian dropsy, as distressing a disease as it was, was one that the patient had the potential to live with for some duration. This was in stark contrast to an operation of an urgent nature like caesarean section, which was performed with relative frequency in eighteenth-century France, fostered by the country's Catholicism, which venerated the life of the child, and which in turn gave cultural impetus for the operation.[69] To open the abdomen was to put the patient at risk of exhaustion, post-operative disease and haemorrhage. Undertaking this in any case where the patient was not at the point of imminent death required a significant shift in surgical convention. For some, it was a new and exciting prospect—for others, a dangerous attack on the defined limits of surgery. Even *articulating* the possibility of the operation was thought to be a powerful and potentially dangerous move. As Anton De Haen, a leading light in eighteenth-century Viennese medicine described the operation: 'it would not do to talk about, lest some reckless surgeon should attempt to perform it'.[70]

By the of the century, the operation had become conceptualised as a procedure better suited to future rather than present-day medicine. 'I am persuaded that a time will come when this operation will be extended to more numerous cases than I have proposed, and that it will not be difficult to execute', the French surgeon Nicolas Chambon is supposed to have written in 1798.[71] Surgeons expressed the view that innovation in ovarian surgery should be neither inevitable nor random; rather it was essential that the profession waited for the right time and indeed the right case to come along—however long that may be—so that

the operation began with success rather than failure. Before the operation had even materialised in physical form, complex ideas of temporality were at work. Morand's citation of ancient cases of the removal of ovaries contrasted with Chambon's contention that the operation was better suited to future generations of surgeons. Practitioners turned to both the past and the future of surgery to answer the question of the operation's justifiability in the present.

Conclusion

Critics and historians such as Michel Foucault and Toby Gelfand have shown that a greater focus upon anatomy and dissection led to an increasingly 'surgical' way of thinking among doctors in the late eighteenth and early nineteenth centuries.[72] Less work has been done, however, to show in what manner exactly this was expressed in the practice of surgery, or why some forms of 'new' surgery were prioritised. In this respect, ovarian surgery provides important nuance to more generalised narratives. The construction of the ovary as a surgical object was dependent on a confluence of factors. The identification of the organ's unique egg-producing function attributed to it in the seventeenth century helped make it an object of novel, physiological interest and drew attention to its pathological complexity. A visually striking, tactile disorder, dropsical ovaries were common enough for cases to be plentiful and the effects distressing enough that practitioners looked to more radical means to treat it. The claim that it was an affliction local to the ovary, rather than the result of a constitutional disorder, raised the possibility that removing the organ would cure the disease entirely. The idea of the relative dispensability of the reproductive organs in comparison with other vital, internal organs further propelled the ovary into the realm of the surgeon.

In 1817 came the claim that Ephraim McDowell had successfully removed diseased ovaries in three women, all of whom had survived.[73] McDowell was novel in that he was reporting multiple cases, in which diseased ovaries had been intentionally removed, demonstrating both a clear objective and consistency. McDowell appeared to have been motivated by practical reasons rather than by a more grandiose objective of proving empirically the theories of French surgeons and claimed to be ignorant of any other attempts to perform the operation. However, his work was not quite as independent as he implied. Many accounts have

sourced McDowell's inspiration to perform the operation from his time as a medical student at the University of Edinburgh, where it is believed he studied under the anatomist John Bell, who had a special interest in diseases of the ovaries and their surgical potential. McDowell personally sent Bell a copy of his report of the cases, suggesting a degree of kinship had existed between the two.[74] However, it was only upon returning to his small practice in rural Kentucky that McDowell was remote enough from the scrutiny of his peers to be able to perform the operations with relative anonymity.[75]

McDowell had brought the operation into practice, and yet, in 1819, he echoed the fears Anton De Haen had expressed about the unregulated diffusion of the operation into the hands of any and every practitioner. McDowell openly declared his wish that the operation should not become part of regular surgical practice, implying instead that the operation needed to be carefully controlled, as its danger would be greatly increased if it fell into the hands of 'the mechanical surgeon', to whom he believed the operation should remain 'forever incomprehensible'.[76] Cognisant of the suspicion that lingered around it, McDowell took the remarkable step of cautioning against the use of an operation that he himself had helped make a reality.

By the 1820s, the operation had been discussed for over seventy years; however, its justifiability was far from established. If the technique of opening the peritoneum and cutting out the ovary was no longer completely novel, what it represented was. Far from the successes of McDowell hastening surgery into a new era, ovarian surgery was soon to be catapulted onto the pages of the medical press, where it was to become one of the most enduringly controversial topics in British medicine.

Notes

1. George Eliot, *Middlemarch: A Study of Provincial Life* (London: Vintage, 2007), 8.
2. Ephraim McDowell, 'Three Cases of Extirpation of Diseased Ovaria', *Eclectic Repertory and Analytical Review* 7 (1817): 242–243.
3. Ezra Michener, 'Case of Diseased Ovarium', *Eclectic Repertory and Analytical Review* 8 (1818): 114–115.
4. Mary Young Ridenbaugh, *The Biography of Ephraim McDowell M.D., the Father of Ovariotomy* (New York: Charles L. Webster, 1890);

August Schachner, *Ephraim McDowell: 'Father of Ovariotomy' and Founder of Abdominal Surgery* (Philadelphia and London: J. B. Lippincott Company, 1921). Both authors had a connection to McDowell; Ridenbaugh was his granddaughter and Schachner was a fellow Kentucky surgeon who would later lead the campaign to have Ephraim McDowell's house restored and converted into a museum.

5. Schachner, *Ephraim McDowell*, 4.
6. Schachner, *Ephraim McDowell*, 61.
7. McDowell in one case refers to the woman's 'master'. Ephraim McDowell, 'Observations on Diseased Ovaria', *Eclectic Repertory and Analytical Review* 9 (1819): 551. Deirdre Cooper Owens notes that the black population of Danville was very small, making it all the more striking that McDowell's next four cases involved black patients. It suggests that McDowell actively pursued cases within the black community so as to experiment with the operation. Deirdre Cooper Owens, *Medical Bondage: Race, Gender, and the Origins of American Gynecology* (Athens: University of Georgia Press, 2017), 32.
8. Regnier De Graaf, *Regnier de Graaf on the Human Reproductive Organs: An Annotated Translation of 'Tractatus de Virorum Organis Generationi Inservientibus' (1668) and 'De Mulierum Organis Generationi Inservientibus Tractatus Novus' (1672)*, trans. H.D. Jocelyn and B.P. Setchell (Oxford: Blackwell, 1972), 135.
9. Clara Pinto-Correia, *The Ovary of Eve: Egg and Sperm and Preformation* (Chicago: University of Chicago Press, 1997), 42–44. Most preformationists believed the egg to be at the centre of generation. However, there was also a theory of 'spermist' preformation which was briefly in vogue at the end of the seventeenth century, the proponents of which suggested that it was in fact sperm that was the container of all preformed life.
10. A prominent example was John Hunter's research looking at the effect of removing one ovary upon the generative potential of pigs. Hunter was fascinated as to the physiological reasoning behind there being two ovaries, and his experimentations led him to conclude that while generation was still possible, the loss of one ovary would considerably diminish the number of young produced. John Hunter, 'An Experiment to Determine the Effect of Extirpating One Ovarium Upon the Number of Young Produced', *Philosophical Transactions of the Royal Society* 77 (1787): 239.
11. Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, MA and London: Harvard University Press, 1990), 149.
12. Darren Wagner, 'Visualisations of the Womb Through Tropes, Dissection and Illustration (c. 1660–1774)', in *Book Illustration in the Long Eighteenth*

Century: Reconfiguring the Visual Periphery of the Text, ed. Christina Ionescu (Newcastle: Cambridge Scholars Publishing, 2011), 542.

13. Matthew Baillie, *An Account of a Particular Change of Structure in the Human Ovarium from the Philosophical Transactions* (London: s.n., 1789), 2.
14. Jean Astruc, *A Treatise on the Diseases of Women*, vol. 3. (London: J. Nourse, 1767), 14.
15. Richard Browne Cheston, *Pathological Inquiries and Observations in Surgery, from the Dissections of Morbid Bodies. With an Appendix Containing Twelve Cases on Different Subjects* (Gloucester. R. Raikes, 1766), 47.
16. Astruc, *A Treatise on the Diseases of Women*, 60–62.
17. James Yonge, 'An Account of Balls of Hair Taken from the Uterus and Ovaria of Several Women. By Mr. James Yonge, F.R.S. Communicated to Dr. Hans Sloane, R.S. Secr.', *Philosophical Transactions of the Royal Society* 25, no. 309 (1706): 2391.
18. James Cleghorn, 'The History of an Ovarium, Wherein Were Found Teeth, Hair and Bones. By James Cleghorn M.B. Communicated by Robert Perceval M.D.', *Transactions of the Royal Irish Academy* 1 (1787): 74–75.
19. Having always accepted the dominant view that the condition was a by-product of conception, the girl's age, apparent virginity and underdeveloped womb led Baillie to conclude that the condition was simply an ovary that had gone pathologically awry, curiously and haphazardly imitating the process of foetal formation. In his rather fortunate position as the nephew of surgeon and anatomist John Hunter, Baillie was able to access Hunter's rich collection of anatomical specimens, unearthing further examples of the tumours which consolidated his claim. Baillie, *An Account of a Particular Change*, 6–8.
20. Andrew Cunningham, *The Anatomist Anatomis'd: An Experimental Discipline in Enlightenment Europe* (Farnham: Ashgate, 2010), 170.
21. The physician Henry Manning's extensive *Treatise of the Female Diseases*, published in 1771, devoted little more than a page to diseases of the ovaries and Fallopian tubes, Manning writing that they were 'seldom or never perceptible, even to the patient herself' until the disease had progressed to an advanced stage. Henry Manning, *A Treatise on Female Diseases* (London: R. Baldwin, 1771), 307.
22. 'Of all the parts of the female pelvis, the ovaries are most frequently diseased' wrote the Scottish surgeon Charles Bell in 1798, '…in reference to practice, the knowledge of them is unimportant, if we except that of dropsy, so frequently occurring'. Charles Bell, *A System of Dissection, Explaining the Anatomy of the Human Body, the Manner of Displaying*

the Parts, and Their Varieties in Diseases (Edinburgh: Mundell and Son, 1798), 89.

23. However, what exactly this underlying problem was would remain a subject of debate until the early nineteenth century, when it began to be understood better as a symptom of cardiac, renal and other abnormalities.
24. Physician and antiquary Richard Wilkes discussed the treatment and etymology of dropsy in ancient Greece. Richard Wilkes, *An Historical Essay on the Dropsy* (London: Law & Ray, 1781), 1–7.
25. Anonymous, *An Account of the Causes of Some Particular Rebellious Distempers* (London: s.n., 1670), 76–78.
26. Bills of mortality attest to this; the 1764 Bill for London reported 956 deaths from the disease in that year, making it the sixth most fatal of the fifty-seven diseases listed. For the year 1798, dropsy again proved the sixth most fatal of fifty-four diseases listed, the cause of 784 deaths in the city. 'General Bills of Mortality for the Year 1764', *Scots Magazine* 26 (1764): 72; 'Account of Diseases in London' *Monthly Magazine* 7, no. 41 (1799): 68–69.
27. Donald Monro, *An Essay on the Dropsy and Its Different Species* (London: D. Wilson & T. Durham, 1756), 14.
28. In 1810 for example, it was a male figure that cartoonist Thomas Rowlandson chose to represent dropsy in his caricature 'Dropsy Courting Consumption'. In the illustration, a large dropsical gentleman is courting a rake-thin, consumptive lady, using for comical effect the disparity in their weight.
29. Wilkes, *An Historical* Essay, 94–95; John Leake, *Medical Instructions Towards the Prevention, and Cure of Chronic or Slow Diseases Peculiar to Women* (London: R. Baldwin, 1777), 336–337; Thomas Short, *A Discourse Concerning the Causes and Effects of Corpulency* (London: J. Roberts, 1728).
30. Lisa W. Smith, 'Imagining Women's Fertility Before Technology', *Journal of Medical Humanities* 31, no. 1 (2010): 72. As Smith notes, an absence of menstruation was not necessarily taken as a sign of pregnancy but could be indicative of a wide range of conditions.
31. Benjamin Gooch, *Medical and Chirurgical Observations, as an Appendix to a Former Publication* (London and Norwich: G. Robinson and R. Beatniffe, 1773), 110–117.
32. Philip Meadows Martineau, 'An Extraordinary Case of a Dropsy of the Ovarium, with Some Remarks. By Mr. Philip Meadows Martineau, Surgeon to the Norfolk and Norwich Hospital; Communicated by John Hunter, Esq. F. R. S.', *Philosophical Transactions of the Royal Society* 74 (1784): 471.
33. Yonge, 'An Account of Balls of Hair', 2389.

34. Cheston, *Pathological Inquiries*, 44.
35. William Luxmoore, *An Address to Hydropic Patients* (London: W. Wilson, 1796), 18–19.
36. William Cullen, *First Lines of the Practice of Physic*, vol. 4 (Edinburgh: C. Elliot, T. Kay, & Co, 1788), 327; Benjamin Bell, *A System of Surgery*, vol. 1 (Edinburgh: Charles Elliot and G. Robinson, 1783), 415.
37. William Withering, *An Account of the Foxglove and Some of Its Medical Uses* (Birmingham: Swinney, 1785), 203.
38. Martineau, 'An Extraordinary Case', 472.
39. 'John Hunter: A Copy of Notes Taken at His Lectures on Surgery', 2 (1787), Western Manuscripts MS5598 (Wellcome Collection).
40. Lynda Payne, *With Words and Knives: Learning Medical Dispassion in Early Modern England* (Aldershot and Burlington: Ashgate, 2007), 87.
41. Richard Blackmore, *A Treatise of the Spleen and Vapours* (London: J. Pemberton, 1725), 5.
42. Richard Blackmore, *A Critical Dissertation Upon the Spleen* (London: J. Pemberton, 1725), 51–52.
43. Blackmore, *A Critical Dissertation*, 5.
44. Sarah Parker, 'Subtle Bodies: The Limits of Categories in Girolamo Cardano's *De Subtilitate*', in *Anatomy and the Organization of Knowledge, 1500–1850*, ed. Matthew Landors and Brian Muñoz (London and New York: Routledge, 2016), 79.
45. Toby Gelfand, *Professionalizing Modern Medicine: Paris Surgeons and Medical Science and Institutions in the Eighteenth Century* (Westport and London: Greenwood, 1980), 9.
46. Beauredont, 'A Monsieur le doyen de la Société de l'Ausun…', ARC 17, d. 3, no. 45 (c. 1781–1782), Archives de l'Académie Royale de Chirurgie (Académie Nationale de Médicine), 5.
47. Reports of caesarean section, for example, can be occasionally found, where a baby who had become obstructed in labour was able to be saved. The mothers almost invariably died, although in 1738 the midwife Mary Donally, in advance of any surgeon, performed a caesarean in which the mother survived after twelve days of obstructed labour in which the child had died. Donally delivered Alice O' Neal, a farmer's wife from Armagh, by cutting open her abdomen and uterus with a razor. In addition, surgical texts of the eighteenth century recommended abdominal procedures for severe injuries, and operations for hernia were also described, which involved making minor incisions in the abdomen. Lisa Forman Cody, *Birthing the Nation: Sex, Science and the Conception of Eighteenth-Century Britons* (Oxford: Oxford University Press, 2005), 40.

48. Jane Eliot Sewell, *Bountiful Bodies: Spencer Wells, Lawson Tait and the Birth of British Gynaecology* (Ph.D. thesis, Johns Hopkins University, 1990), 315.
49. Katherine A. Walker, 'Pain and Surgery in England, c. 1620–1740', *Medical History* 59, no. 2 (2015): 270.
50. Laurence Brockliss and Colin Jones, *The Medical World of Early Modern France* (Oxford: Clarendon Press, 1997), 581.
51. Sauveur-François Morand, 'Remarques sur le Observations précédentes, avec un précis de quelques autres, sur le meme sujet', in 'Plusieurs Mémoires et Observations sur l'Enkistée et le Skirre des Ovaires', *Memoires de l'Academie Royale de Chirurgie* 2 (1753): 455–460.
52. Jean Delaporte, 'Hydropsie Enkistée de l'Ovaire attaquée par incision', in 'Plusieurs Mémoires et Observations sur l'Enkistée et le Skirre des Ovaires', *Memoires de l'Academie Royale de Chirurgie* 2 (1753).
53. Delaporte, 'Hydropsie Enkistée', 455.
54. Morand, 'Remarques sur le Observations précédentes', 459.
55. Philippe, 'D'un Mémoire sur l'hydropsie de l'ovaire', as reported to the Society by Destremau, ARC 39, d.'maladies de l'ovaire', no. 74—Document (1765), Archives de l'Académie Royale de Chirurgie (Académie Nationale de Médicine), 1; 'la chirurgie de notre siècle n'a pas encor pleinement triomphée de cette commune et cruelle maladie', 9.
56. William Hunter, 'The History of Emphysema', *Medical Observations and Inquiries* 2 (1758): 17–70, 41.
57. William Hunter, 'The History of Emphysema', 44–45.
58. As quoted in Schachner, *Ephraim McDowell*, 141.
59. Robert Houstoun, 'An Account of a Dropsy in the Left Ovary of a Woman, Aged 58. Cured by a Large Incision Made in the Side of the Abdomen', *Philosophical Transactions of the Royal Society* 33, no. 381 (1724): 9.
60. Lawson Tait, 'Address on the Principle of Exploratory and Confirmatory Incisions', *Lancet* 137, no. 3519 (7 February 1891): 292–296.
61. Pott did, however, consider the implications removing the ovaries would have on the woman's physiology, reporting that after the operation her breasts had disappeared, and her body had become more muscular, challenging the predominant view that removing the ovaries would not impair the general physiology of the body. Percivall Pott, *Chirurgical Observations* (London: T. J. Carnegy, 1775), 184–186.
62. Jean-Baptiste Laumonier, 'Observations sur un Dêpot de la Trompe et sur l'Extirpation des Ovaires', *Histoire de la Société Royale de Médecine* 5 (1787): 296–300.
63. Laumonier, 'Observations sur un Dêpot de la Trompe', 300.

64. Caroline C. Hannaway, 'The Société Royale de Médecine and Epidemics in the Ancien Régime', *Bulletin of the History of Medicine* 46, no. 3 (1972): 257.
65. 'Médicine-Pratique', *Histoire de la Société Royale de Médecine* 8 (1790): 7.
66. Paul Marx, 'Un Conflit Médical à l'Hôtel-Dieu de Rouen en 1790', *Histoire des Sciences Médicales* 19, no. 4 (1985): 382.
67. Paul Marx, 'Un Conflit Médical à l'Hôtel-Dieu de Rouen en 1790', *Échanges Magazine* 19 (1992): 33.
68. Marx, 'Un Conflit Médical' (1985): 380.
69. Brockliss and Jones, *The Medical World*, 561–562.
70. As quoted in Randolph E. Peaslee, *Ovarian Tumors: Their Pathology, Diagnosis and Treatment, Especially by Ovariotomy* (New York: D. Appelton, 1872), 234.
71. Peaslee, *Ovarian Tumours*, 234–235.
72. Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception*, trans. A.M. Sheridan (London: Routledge, 2003), 124–148; Gelfand, *Professionalizing Modern Medicine*, 9.
73. McDowell, 'Three Cases of Extirpation', 242–245.
74. Ornella Moscucci, *The Science of Woman: Gynaecology and Gender in England 1800–1929* (Cambridge University Press, 1990), 135–136; Ann Dally, *Women Under the Knife: A History of Surgery* (London: Hutchinson Radius, 1991), 11–13. The connection between McDowell and Bell seems to have first originated with a Kentucky surgeon named John D. Jackson sometime in the nineteenth century. The role of Bell became important in asserting that while an American surgeon may have had success in performing it, the operation was, in spirit, a British one. McDowell's early biographer refuted the connection. August Schachner wrote that while McDowell may have been influenced more generally by the powerful teaching of Bell 'we are thoroughly convinced that the idea of ovariotomy originated in the fertile brain of Dr. McDowell'. Schachner, 'Ephraim McDowell', 11–12.
75. Jean Bowra, 'Making A Man A Great Man: Ephraim McDowell, Ovariotomy and History', presented at Social Change in the Twenty-First-Century (University of Queensland, October 2005), 5–6, http://eprints.qut.edu.au/3454/1/3454.pdf, accessed 13 November 2010.
76. McDowell, 'Observations on Diseased Ovaria', 548.