

## CHAPTER V.

### OVARIOTOMY.

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It is characteristic of every advance which has been made in surgery, as in all other human affairs, that the early phases are developed with extreme slowness, so that in perusing the history of any surgical progress it is almost certain that we should have to go a long way back to see the first germs of the movement. I have, I believe, examined very exhaustively the literary history of ovariectomy, but I can find no record of any deliberate attempt to relieve a patient from ovarian dropsy by opening the abdomen earlier than the year 1701. It is a singular and striking illustration of the slow progress made by any new idea, that, so late as 1861, an operation which was successfully performed by Robert Houston, of Glasgow, one hundred and sixty years before, should have been characterized by one of the leading surgeons of his time as an operation which ought to subject its performer to a criminal indictment for manslaughter. I can, however, well remember, in the days when I was a student at Edinburgh, one of the favorite subjects for discussion in the students' medical societies was the doubtful point of ovariectomy being a justifiable operation, and now, when I find my mortality varying from three to five per cent., it sometimes seems to me as if these discussions were but ill-remembered dreams; for it must be admitted there is no important operation which has received the same hostile criticism, the same searching scrutiny, or finally has achieved the same triumphant admittance as ovariectomy. Its critics have subjected it to a statistical ordeal through which no other surgical operation has passed, and it is the only one which has achieved a legitimate and complete establishment.

The merit of being the first to utter an opinion in favor of the radical cure of ovarian dropsy has usually been ascribed to William Hunter, but Houston's operation was performed seventeen years before Hunter's birth, and so far as the history of this question has been unearthed, I think the whole merit must be

given to the Glasgow surgeon. So important do I regard this as being the first case, that I give at length what information I have been able to obtain concerning this most interesting man and the details of his operation. For much of this I am obliged to Mr. Alexander Duncan, of Glasgow.

Robert Houston was the son of a Glasgow surgeon of the same name, who held the office of Visitor of the Faculty of Physicians and Surgeons of Glasgow in 1669, and again in 1677, this office being virtually that of President of the Surgeons. Robert Houston the younger was regularly apprenticed to his father in 1665, this being before the days of the existence of any medical schools in Scotland, and it is probable he had few other opportunities of making himself acquainted with the surgical art than those afforded him by his seven years' apprenticeship to his father. At its expiration he became a member of the Faculty and began to practise in Glasgow as a "surgeon-apothecary," or general practitioner.

In 1691 he was himself elected Visitor of the Faculty, an honor which was more than once renewed, so that it becomes perfectly clear that in his native city he was at a very young age a person of distinction, and probably an operating surgeon of large experience. In 1697 he took an active part in forming a collection of medical works, which was the nucleus of the present library of the Glasgow Faculty. The "list of such worthie persones" as contributed to this collection, with the names of the works gifted by each, has been preserved, and under Houston's name stands a considerable list of donations. Of these some are no longer in the library, but others of them, bearing his autograph, are still to be found on its shelves.

In 1711 he appears to have contemplated the somewhat risky step of retiring from general practice and limiting himself to the work of a physician. Houston's is the first case in Glasgow of such a practice, and his example was followed by only some three or four others in the course of the eighteenth century, of men withdrawing into the quiet of purely consulting practice after having made their positions as general practitioners. To accomplish this object of his ambition Houston required to obtain the degree of Doctor of Medicine, a distinction which had been acquired by three or four of his townsmen by residence abroad, usually at Utrecht or Leyden. Houston, however, resolved to gain his degree from the University of his native city, which had the power of granting such degrees even though it had no medical school, and was entirely destitute of a medical faculty. In 1711 he applied to be admitted to examination for the degree, but it does not appear that the University authorities cared to com-

ply with his request, for we find in the Archives of the University a minute dated 31st December of that year, that "Mr. Robert Houstoun, surgeon, who sometime agoe, applyed for the Doctorat in Medicin did still insist that he might be examined in order to his graduation. The Faculty considering that they might still want Professors of Medicin doe appoint some of the Physicians in the city to assist at the examination." Before this extra-academical board Houstoun passed his trials successfully on January 3, 1712, and Mr. Duncan has favored me with an extremely interesting extract from the records of the examination of this remarkable candidate.

Shortly after graduating, and probably between the years 1713 and 1715, Houstoun seems to have found the field offered for his ambition in Glasgow too restricted, and he was induced to attempt the larger field of the English metropolis. In London it is probable that he practised as a general practitioner, for in the thirty-third volume of the "Philosophical Transactions," page 388, he mentions that he was engaged in the practice of midwifery, and of course no London physician would be so engaged at that time. All his published works tend, however, to show that the bent of his mind still lay in the direction of surgery, and chiefly of abdominal surgery. In 1720 he published a controversial pamphlet entitled "Animadversions on a late Pamphlet entitled Lithotomia Douglasiana," and in 1726 appeared his "History of Ruptures and Rupture Cures."

In 1722 he contributed to the Royal Society "An Account of a Case of Extra-Uterine Fœtus, taken out of a Woman after Death." In this case it is extremely noteworthy that he had proposed to operate during the life of the patient, and his offer had been declined; had it been accepted, this remarkable man would have ranked as the first operator in such a case, and it is possible he might have been the first successfully to interfere in this displacement. In 1724 he read before the Royal Society the case upon which his reputation was chiefly founded, and which formed the first case of ovariectomy. For this paper he was elected a Fellow of the Royal Society in the following year. He died in London, on May 15, 1734, about the age of seventy, so we may estimate that his birth took place about the year 1654. Unfortunately, I have not been able so far to obtain any account of his life and doings while in London, save that he practised somewhere about what was then the West End. His case of ovariectomy is entitled "An Account of a Dropsy of the Left Ovary of a Woman aged Fifty-eight, Cured by a Large Incision made in the Side of the Abdomen by Dr. Robert Houstoun," and the following is the gist of his description of his operation:

"I found this tumor grown to so monstrous a bulk, that it engrossed the whole left side from the umbilicus to the pubes, and stretched the abdominal muscles to a great degree. It drew toward a point. From being obliged to lie continually on her back, she was grievously excoriated, which added much to her sufferings, which, together with a want of rest and appetite, had greatly emaciated her.

"The operation of puncturing the abdomen being proposed, she consented: accordingly, with an imposthume lancet I laid open about an inch, but finding nothing issue I enlarged it two inches, and even then nothing came forth but a little thin, yellowish serum, so I ventured to lay it open about two inches more. I was not a little startled after so large an aperture to find only a glutinous substance bung up this orifice. The difficulty was how to remove it; I tried my probe and endeavored with my fingers, but it was all in vain, it was so slippery that it eluded every touch and the strongest hold I could take.

"I wanted in this place almost everything necessary, but be-thought of a very odd instrument, yet as good as the best in its consequence, because it answered the end proposed. I took a strong fir-splinter, such as the poor in that country use to burn instead of candles; I wrapped about the end of this splinter some loose lint, and thrust it into the wound, and by turning and winding it I drew out above two yards in length of a substance thicker than any jelly, or rather like glue fresh made and hung out to dry; its breadth was above ten inches; this was followed by nine full quarts of such matter as is met with in steatomatous and atheromatous tumors, with several hydatides, of various sizes, containing a yellowish serum, the least of them larger than an orange, with several large pieces of membrane, which seemed to be parts of the distended ovary. I then squeezed out all I could and stitched up the wound in three places, almost equidistant; I was obliged to make use of Lucatellus' balsam, to cover a pledget, the whole length of the wound, and over that laid several compresses, dipped in warm French brandy; and because I judged that the parts might have lost their spring by so vast and so long a distention, I dipped in the same a napkin four times folded and applied it over all the dressings, and with a couple of strong towels which were also dipped, I swathed her round the body, and then gave her an opiate medicine, which was ordered to be repeated at intervals.

"She afterward mended apace, to the admiration of every one, and lived in perfect health from that time, which was in August, 1701, till October, 1714, when she died in ten days' sickness."

It may be said that Houstoun began this operation with the

intention of doing little more than relieving the patient by a tapping, but I presume that the first man who put a kettle on the fire had no intention of evolving a steam-engine from the simple process of boiling water; yet the discovery of how to boil water was by far the most important of all the phases through which the invention of the steam-engine has passed. There can be no question from Houstoun's description that he had diagnosed a dropsy of the ovary and that he had to deal with a condition which is often one of the most difficult that can be met with in the performance of ovariectomy, and he completed his operation by removing the cyst. Although he does not describe his division of the pedicle, or his having tied it, it is almost certain that he did both. He certainly must have seen and divided the pedicle, for he describes the disease as being of the left ovary, therefore he saw the pedicle. Perhaps he tore it and it did not need tying. That he performed a complete ovariectomy is certain, from his having noticed secondary cysts as well as from the recovery of his patient and the fact that she lived for thirteen years afterward, in perfect health.

William Hunter and his brother John Hunter must have known of Houstoun's case, for they were born and brought up in the district in which it occurred, and William Hunter lived for years in the city near which it was performed. They both advocated the theory of the performance of the operation, and John Hunter is reported to have said: "I cannot see any 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. Why should not a woman suffer spaying as other animals do? The merely making an opening into the abdomen would never be followed by death in consequence of it?"

Their friend John Bell, who practised in Edinburgh from 1790 till 1816, also pronounced in favor of its performance, but he is not known to have done anything toward trying it himself, and it is to a young Scotchman,<sup>1</sup> who was a pupil of John Bell's in 1793, that we owe the revival of the operation and its performance upon a scale which amounted to that of a legitimate experiment. Ephraim McDowell has been honored by the medical profession in America as the "Father of Ovariectomy," and whether we admit the accuracy of the title or not, there can be no doubt that it was in the backwoods of Kentucky that abdominal surgery received one of its greatest impulses. In 1809 the

<sup>1</sup> My American readers may object that McDowell was not born in Scotland. Of this, however, we are not yet clear. At any rate, his father and mother were Scotch, and at the time of his birth, 1771, the States did not exist.

second ovariectomy was performed successfully and the patient survived it thirty-two years. In 1817 Dr. McDowell published an account of these and of two other cases he had performed, and, as might be expected, his statements were received with general incredulity. The editor of the *British and Foreign Medical and Chirurgical Review* was bold enough to distinctly deny the credibility of McDowell's statements, but in 1827, when the authenticity of the accounts had been established beyond doubt, he had the manliness to "beg pardon of God and of Dr. McDowell of Danville" for his hardiness. The operation was performed twelve times in all by Dr. McDowell, with a mortality of thirty-three per cent., and in one other case he failed to complete the operation.

Lizars tells us that about 1816 Dr. McDowell sent his manuscript to John Bell, at Edinburgh, for his perusal. At that time the great surgeon had gone to Rome, suffering from his fatal illness, and the manuscript was read by John Lizars, who was doing John Bell's work. This accounts for Lizars being the first to follow in Houstoun's footsteps in Scotland, and it affords a curiously sequent history of the early phases of this notable surgical success.

In 1822, Nathan Smith, of New Haven, performed an operation successfully, and in 1823 Lizars made his first attempt, but unfortunately he had made a mistake and there was no tumor. Nathan Smith's case was undoubtedly one of parovarian cyst, and the operation was therefore not an ovariectomy at all. It is notable, however, for the facts that he used the short incision and the short ligature. The curious fact that so many of these early successful cases were parovarian tumors makes me believe that a great many more true ovariectomies were done, of which there are no records, for they probably all died. Parovarian cysts now are removed without any risk at all. I have never lost a single case. It is therefore very likely that they formed the early successes. On February 27, 1825, Mr. Lizars removed an ovarian tumor successfully, using the long ligature. On March 22d of the same year he removed another, using the short ligature, but his patient died. In his fourth case he could not remove the tumor, but the patient recovered from the incomplete operation. He concludes his account of these cases with the remarkable sentence: "From these cases, it appears that there is little danger to apprehend in laying open the abdominal cavity; and that in diseased ovarium, extra-uterine conceptions, *fœtus in utero*, with deformity of the pelvis preventing embryulcia, aneurism of the common or internal iliac arteries, or of the aorta, volvulus, internal hernia, and foreign bodies in the