

be brought into gentle action by diet and mild laxatives; avoid emptying the bladder, especially in extirpation of the uterus, its presence being easily recognized when full and not so liable to be injured; the legs should be wrapped in cotton wool, especially in cold weather, and the temperature of the operating room not less than 85°. The cotton wool can be removed after reaction has been established. There should be ready for use, a couple of dozen of hot towels, which are to be applied, as need may arise, around the body and over the abdomen during the operation; the temperature of the exposed bowels and surface of the body can in this way be easily maintained. It also protects the patient from escaped fluid and blood. I prefer to stand on the right side of the table, which is placed diagonally to the window, so as to allow the light to fall directly upon the abdomen of the patient.

The instruments required for these operations need not be very numerous nor complicated; generally speaking, a scalpel, scissors, director, half a dozen Keberle's forceps, three or four sponges, silver wire, shoemakers' thread, and horse-hair, a needle-holder and needles will suffice. I would press the importance of having clean sponges, instruments and hands, and allow no explorations of the parts during the operation by other hands than your own. Not only must the sponges be clean, but they require to be carefully washed during the operation, in plain water, and then squeezed out of carbolized water before being handed back to the operator. This part of the work should be entrusted to a competent assistant; abundance of boiling water and water, that has been boiled only should be used. If this is attended to, it matters little whether or no carbolic acid is used. It is well, however, to have all instruments, at the time of operation, kept in a 1 to 20 solution of carbolic acid. For ligating the pedicle and all vessels, No. 20 shoemakers' white thread, single or double, well carbolized, is all that is needed. My reasons for preferring this ligature to all others are, that it is quite strong enough, even single, to secure all the vessels that should be enclosed in one ligature, that it affords a safe knot, is easily disintegrated and removed by absorption. This ligature should be soaked at least 24 hours in pure carbolic acid before using, and not allowed to come in contact with water, and for convenience it may be cut

into lengths of about 15 inches and allowed to stand in pure alcohol. For closing the abdominal wound there is nothing better than silver wire for the deep, and carbolized horse hair for the superficial sutures. Great care should be taken when closing the wound, to have the divided structures carefully coapted, while at the same time avoiding the inclosure of any muscular tissue—as advised by Dr. Goodell. By attention to this last point we avoid suppuration in the track of the sutures, and save the patient a great deal of suffering. There can be no advantage from effecting union between the recti muscles. It cannot possibly strengthen the abdominal wall, and must interfere with the proper action of these muscles.

In removing the silver sutures cut the wire close to the skin, with the blades of the scissors lengthwise of the body. In this way, pain and injury of the tissues in the track of the wire are avoided. In all my operations I use horse-hair for the superficial sutures, and never, in any instance, has it slipped or caused the slightest irritation. As to the abdominal wound, there is much need for good judgment in selecting the best place and mode of making the incision. It is most important to confine the wound, as nearly as may be, to the median line midway between the umbilicus and the pubis. In no case should the incision be extended toward the pubis nearer than one and a half inches. The reason for this is that the lower parts of the abdominal wall are the most important for suspension of the bowels, and also because the ligamentous structures of that part, when once divided, are difficult to coapt and retain in juxtaposition till union takes place. A small incision of 1½ to 2½ inches is all that is needed in most cases of ovariectomy or removal of the uterine appendages, and when this wound is properly made, it unites perfectly and becomes almost obliterated after a few months. The abdominal incision should be made in the median line, so as to divide the sheath of the recti muscles without cutting a single muscular fibre, for the reasons already given. The division of the skin and adipose tissue should be made at one stroke of the scalpel; it is worse than mere waste of time to divide the structures upon a director layer by layer; it is a bungling way to operate, and leaves the edges of the wound in such a state as to interfere with primary union. Care is needed in entering the peritoneal cavity; but be