

Keith and others I have generally used ether in this operation, but in my later cases, chloroform. By the use of a very simple apparatus, I believe that chloroform may be used in ovariectomy, and in all other operations, with as much safety and satisfaction as any other anæsthetic.

This apparatus consists of two parts ; (1) an inhaler made by stitching a piece of canton flannel over a wire frame which fits like a small tent over the patient's nose and mouth ; (2) a dropper which consists of a two-ounce bottle with a perforated cork and two metal tubes, one of which merely admits air to the bottle, while the other permits the chloroform to escape drop by drop. By this means I believe that the greatest degree of safety is secured as well as the utmost economy of chloroform.

(2) *Antiseptics*.—In the cases of ovariectomy which I saw Dr. Keith perform he used all the Listerian antiseptic appliances. I could see, however, that he was beginning to doubt as to its expediency. He assured me that he had seen patients die with "brutal haste" from carbolic acid poisoning, and I believe that I can say the same myself. Since then (as is now well known), he has laid carbolic acid aside to a great extent, if not entirely, and prefers to trust to the careful arrest of hæmorrhage and the thorough drainage of the peritoneal cavity.

My own limited experience hardly justifies me in expressing a decided opinion on this important point, but unless there are special reasons for doing so, I shall not hereafter resort to the use of carbolic acid spray, against which several serious objections have been justly urged. My belief is that by exercising due care in arresting hæmorrhage, sponging out the peritoneal cavity till it is absolutely dry, and in making provision for the escape of effused fluids, the danger of septicæmia is sufficiently provided against.

Blood poisoning has occurred in spite of all antiseptic precautions, and it has been escaped in cases not treated antiseptically and in which the circumstances seemed highly favorable to its development.

(3) *Management of Pedicle*.—In my sixteen cases I have transfixed the pedicle with a double ligature and tied it in two halves,

cutting the ligature off short and dropping the pedicle into the pelvis.

So far as I know, this method of treating the pedicle proved satisfactory. I have never seen any bad results from this source. Nevertheless, Dr. Keith's method has seemed to me to be, although somewhat slower, still, on the whole, much more safe and satisfactory.

He first of all seizes the pedicle in one or two pairs of strong forceps with a catch in the handle. If the pedicle is narrow, one pair ; if broad, two, so that the vessels are safely controlled for the time. He then cuts away the tumor, and then he applies his clamp to the pedicle on the cardiac side of the forceps, which latter he then removes, leaving at least one and a half inches of the pedicle projecting beyond the clamp. To this projecting part of the pedicle the actual cautery is applied in the form of a solid mass of iron at a black heat, which slowly sears and shrivels up the tissues of the pedicle.

This part of the procedure is conducted with the utmost care and deliberation, and is sometimes the longest part of the whole operation.

The clamp is formed of two solid metallic bars, furnished with a screw, by which they are made to compress the pedicle with great tightness. There are also two wooden handles to the clamp, by which the surgeon holds it in his left hand while he applies the cautery with his right.

During this part of the operation the peritoneal cavity is filled with soft sponges, and the edges of the wound are held in apposition by the hands of an assistant. Between the abdominal wall and the lower surface of the clamp, a pad of wet cloth is placed to ensure its thorough protection from the action of the cautery. The pedicle is gradually shrivelled up and the debris wiped away until all the pedicle external to the clamp is disposed of. The latter is then unscrewed and removed while the surgeon takes care to retain control of the remainder of the pedicle until he has carefully examined it and satisfied himself that there is no tendency to bleeding. If there is any doubt on this point the pedicle should be transfixed and securely tied, either with strong