

cluded that it is always possible to control hemorrhage in these cases if the kidney be properly exposed, and the proper means to control the hemorrhage be adopted. I have left six or eight forceps hanging out of the wound just as we leave forceps in the vagina after the performance of a vaginal hysterectomy. Forceps can be applied where it is difficult to fasten a ligature. But surely, with forceps and catgut ligatures and packing, no patient should be allowed to bleed to death, nor should nephrectomy become imperative.

It is not necessary for me to delay you with the subsequent details of this operation. A drainage tube is usually placed into the lower part of the wound, outside of the kidney, and another into the different abscess cavities. These may or may not be irrigated, according to the leanings of the surgeon in charge.

Death rarely results from nephrotomy *per se*, but results as a consequence of the gravity of the disease that is present.

PARTIAL EXCISION OF THE KIDNEY.

Portions of the kidney may be cut out. This has been done on many occasions. A V-shaped piece may be taken out, containing a tubercular focus, and the edges and deeper structures may be brought together by means of catgut sutures to check the hemorrhage. Catgut can always be applied to renal vessels without producing any nucleus for the subsequent formation of stone. The catgut is absorbed and disappears.

Many of these cases on which such operations have been performed, have healed without sinuses. In injuries of the kidney it may be possible to perform partial excision. When innocent growths are found they may be removed.

NEPHRECTOMY.

The technique of this operation is difficult in some cases. When the operation is performed through the abdominal cavity, the peritoneum is incised over the tumor, and stripped backwards, so that the kidney lies free. The vessels are then isolated, the ureter is tied off or removed if diseased; if not removed, some operators prefer to bring the end of the ureter into the wound so that there may be no septic nucleus left behind. The vessels are then ligated, either by means of a blunt aneurysm needle carrying the ligature around them, encircling them *en masse*, or they are tied individually, while the pedicle is compressed by forceps. The loose portion of the peritoneum that formerly covered the growth, may now be allowed to drop back with or without suture of its edges by running catgut sutures. The blood that may clot in this