

da Vinci® Nephrectomy



Overview

This minimally-invasive procedure, performed with the da Vinci Surgical System, is used to remove a diseased kidney or to remove a healthy kidney for transplant.

Preparation

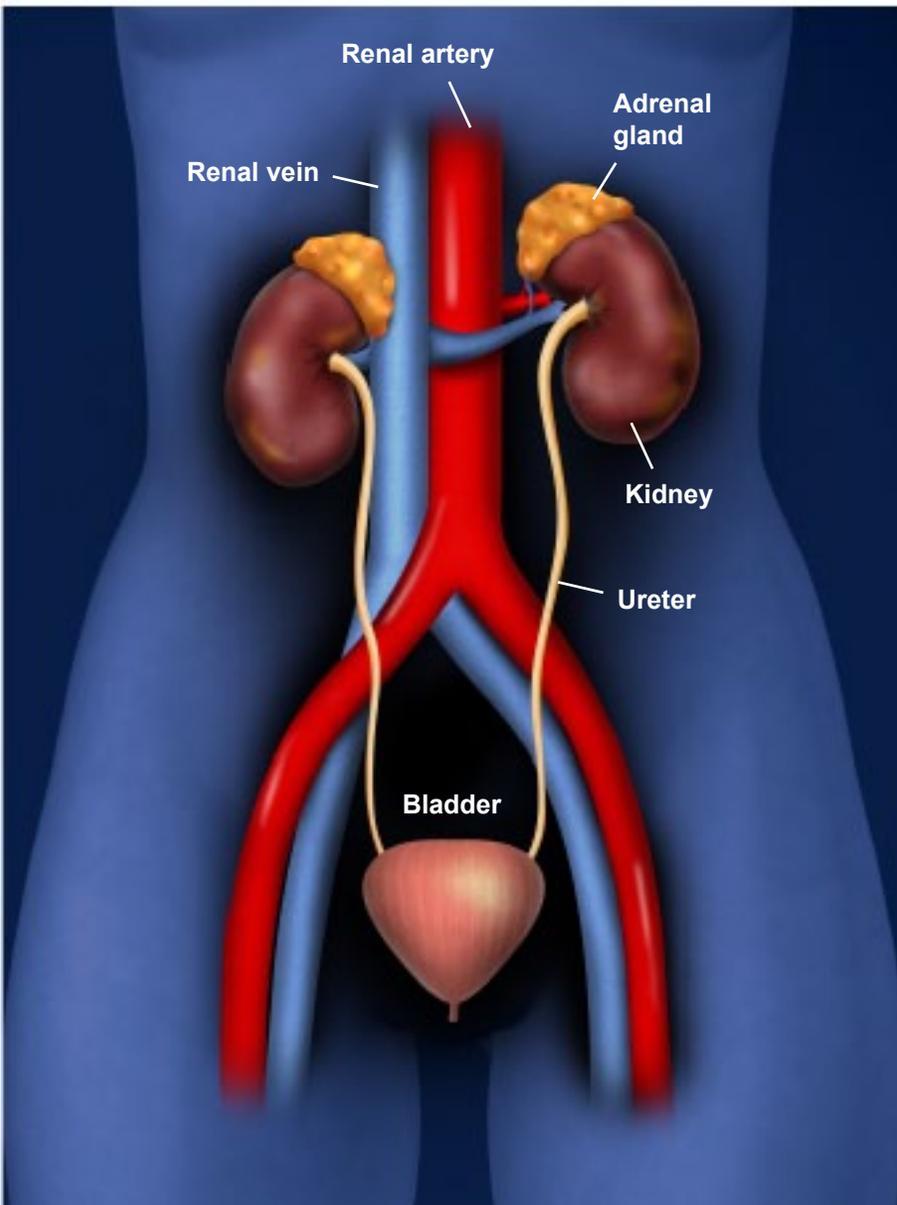
After anesthesia is administered, the patient is positioned on an adjustable platform that allows the robotic surgical arms full access to the patient's side. The skin is cleaned and sterilized.

Accessing the Kidney

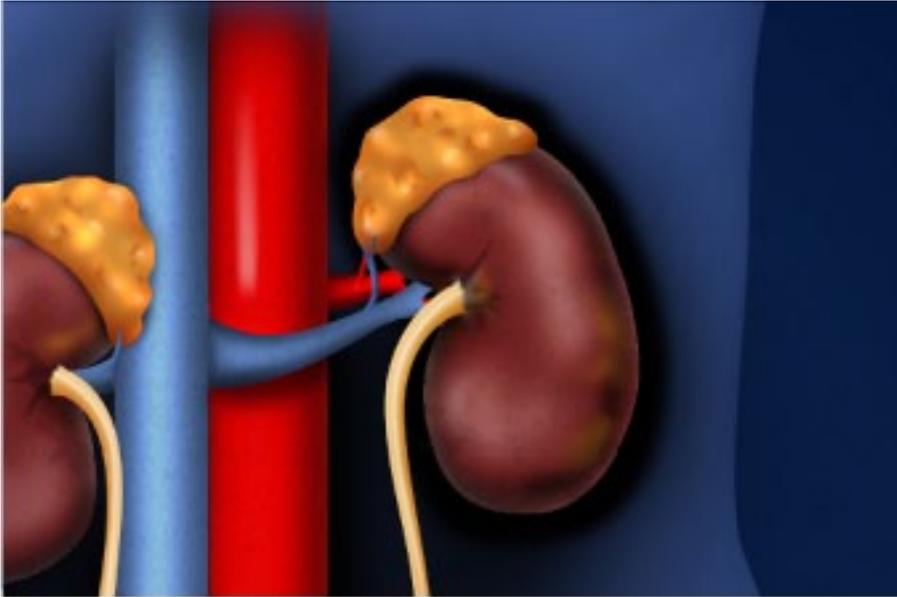
Four small incisions are created on the abdomen. The surgery will be performed through these tiny holes, rather than the large incision traditionally used for open surgery. This approach minimizes pain, scarring, risk of infection, and recovery time. An additional incision may be needed at the end of the surgery to remove the detached kidney from the body.

Instruments Inserted

The surgeon attaches an endoscopic camera and various surgical instruments to the robotic arms and carefully inserts the instruments through the incisions. The surgeon then takes a seat at the console to perform the procedure. A video monitor in the console, which is linked to the endoscope, allows the surgeon to view the surgical site in 3D and precisely control the instruments during the surgery.



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Isolating the Kidney

The surgeon uses the tools on the robotic arms to carefully separate the kidney from the colon and from other structures in the abdomen such as the spleen, liver and gall bladder.

Detaching the Kidney

The blood vessels that connect the kidney to the circulatory system and the ureter that connects the kidney to the bladder are sealed and then carefully cut to release the kidney. The ureter, adrenal gland, and some surrounding tissue may also need to be removed. The kidney is placed in a surgical retrieval bag inserted through one of the incisions in the abdomen.

End of Procedure and Aftercare

The instruments are removed, and the retrieval bag is removed through an incision. The incisions are then closed and bandaged. Most patients can go home after an overnight stay in the hospital. Patients usually can resume normal activities within 7 to 10 days - about three times faster than recovery for an open procedure.

