

**Subcutaneous pelvioureteral lumbar implantation, in lieu of ureterectomy after nephrectomy / by A. Ernest Gallant.**

**Contributors**

Gallant, A. Ernest.  
Royal College of Surgeons of England

**Publication/Creation**

[New York] : [publisher not identified], 1906.

**Persistent URL**

<https://wellcomecollection.org/works/frjyqqgc>

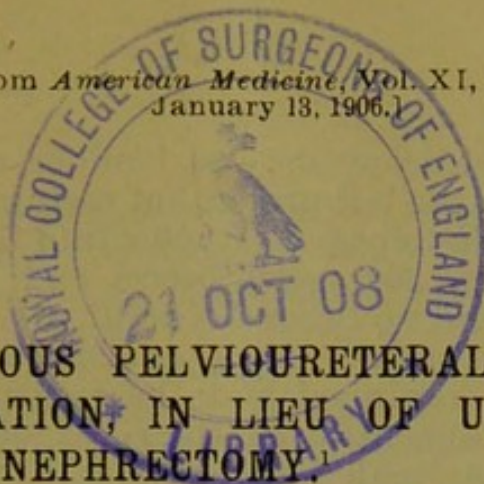
**Provider**

Royal College of Surgeons

**License and attribution**

This material has been provided by This material has been provided by The Royal College of Surgeons of England. The original may be consulted at The Royal College of Surgeons of England. where the originals may be consulted. Conditions of use: it is possible this item is protected by copyright and/or related rights. You are free to use this item in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s).

21  
[Reprinted from *American Medicine*, Vol. XI, No. 2, pages 65-67,  
January 13, 1906.]



## SUBCUTANEOUS PELVIOURETERAL LUMBAR IM- PLANTATION, IN LIEU OF URETERECTOMY AFTER NEPHRECTOMY.<sup>1</sup>

BY

A. ERNEST GALLANT, M.D.,

of New York City.

Professor of Gynecology, New York School for Clinical Medicine;  
Consulting Surgeon, Jamaica Hospital; Assistant Gynecol-  
ogist, Roosevelt Hospital, Outpatient Depart-  
ment, etc.

Is removal of the ureter after nephrectomy advisable, desirable, or necessary? My own answer to this important question can best be stated by a recital of the history, method of operation, and outcome of the case which lead up to the conclusions hereafter stated.

April 19, 1904, in response to a call from Dr. L. H. Moss, I saw Mrs. S., aged 29, mother of three children, the last born December 25, 1899, instrumental delivery. May 5, 1900, Dr. E. B. Cragin removed bilateral ovarian dermoids and left pyosalpinx, with the uterus. From April 10 to 16, 1904, she has been suffering with pleuritic pains in the right side, which have subsided. Three days ago, after fooling and jumping with the children, she felt something give on the right side, just below the chondral border, followed by a constant stitchlike, but not severe pain. Since the operation of four years ago, her right side has always been weak.

Examination: Patient well nourished, somewhat anemic. Right kidney tender, lower pole palpable; greater curvature of the stomach on a level with the umbilicus. Highest temperature yesterday, 103° F.

Diagnosis: Hydronephrosis from prolapsed kidney. I elevated the foot of the bed and applied Rose's plaster binder.

April 22: Urinalysis showed pus and caudate and conical cells from the kidney pelvis, indicating pyelitis.

<sup>1</sup> Read before the Surgical Section, New York Academy of Medicine, October 6, 1905.

April 24: Cystoscopy showed bladder normal, urine discharging from the left ureter, but owing to a defective lamp I was unable to pass a catheter into the ureter.

April 30: Very few streptococci and staphylococci found in urine, and no tubercle bacilli.

May 1: Urine passed, 38 ounces; May 2, 44 ounces.

As the pain continued and the patient was losing ground, and the distention in the right loin continuing very great, it was decided to bring her to town, catheterize the ureters, and be guided by our findings. After considerable difficulty, Dr. W. Ayres succeeded in introducing a catheter into the pelvis of the left ureter, withdrawing enough urine for examination. On the right side, however, the catheter could not be passed higher than four inches, nor could any urine be drained therefrom.

Diagnosis: Ureteral stricture in scar of former operation. Dr. Louis Heitzman reported that the catheter specimen from left ureter showed pyelitis.

Operation was done May 23, at 7.45 a. m. Pulse 92, temperature 99° F. Dr. Ayres assisted. Dr. Moss administered ether. An oblique incision, six inches long, was made through the skin and through the muscles and fascias by splitting with the fingers. On attempting to free the kidney, a perinephritic abscess at its anterior and upper part was opened. The enlarged kidney (6x4x2½) pelvis, and ureter were very markedly distended down to and below the pelvic brim. After freeing the kidney, its size was diminished by drawing off several ounces of purulent fluid, and the artery and veins ligated with black silk. After cutting the kidney free from the ureter, a probe was introduced down to a point apparently corresponding to that at which the catheter was blocked from below.

The ureter was sutured into the lower angle of the lumbar wound, its mouth opening outside the lumbar fascia, into the subcutaneous fatty tissue. The muscles were sutured in three tiers, and a gauze drain carried down to the vascular stump. A small wick of gauze was inserted into the mouth of the ureter and brought out on the surface. The skin was partially closed with silkwormgut, and dressed with balsam oil.

After a rather stormy first week the pulse and temperature subsided, the discharge diminished, and the general condition rapidly improved, so that on the tenth day she sat up in a chair for 45 minutes, and on June 7,

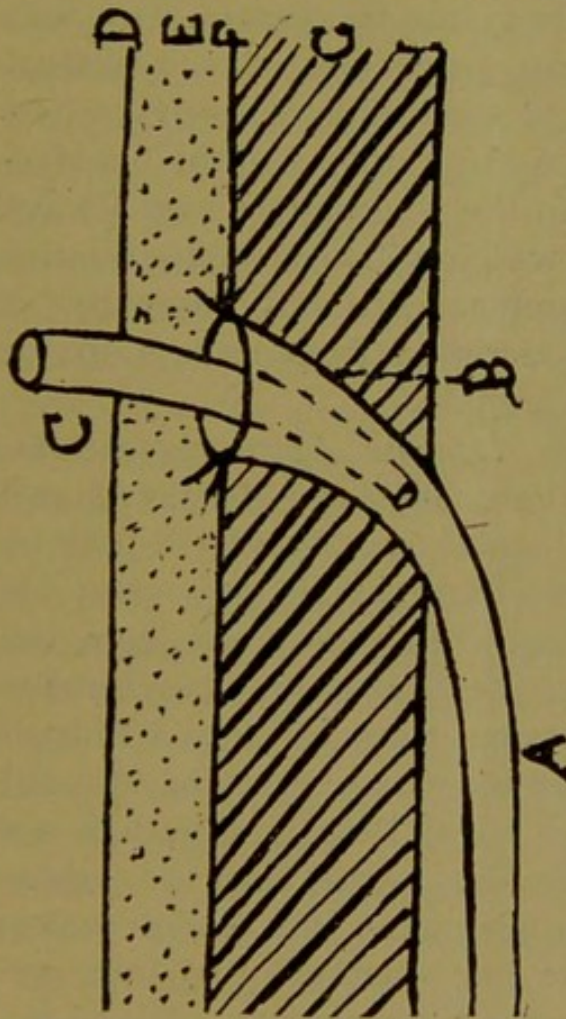
the fourteenth day after operation, returned to her home on Long Island, the discharge having almost ceased.

On June 10, Dr. Moss found both openings closed and temperature 103° F. Both points were reopened and considerable pus let out, the temperature dropped, and the patient was able to get about the house. August 29, the black silk ligatures were extruded from the wound, which closed again in September. The last of the silk

ligatures was extruded in December, 1904, and the wound has been quiescent ever since.

The patient's height is 5 feet 1 inch. Immediately after operation she weighed 100 pounds. At this writing she weighs 135½ pounds, and is in excellent health.

Schede<sup>1</sup> says: "That while removal of the whole (tuberculous) ureter is desirable, it adds considerable risk to an operation which is already severe, and the prolonging of the narcosis may have a serious effect upon the remaining kidney. There is also reason to suppose that tuberculosis of the ureter may disappear spontaneously when the affected



A, ureter; B, stump of renal pelvis sutured to lumbar fascia; C, drainage-tube; D, skin; E, subcutaneous fat; F, lumbar fascia; G, lumbar muscles.

kidney has been removed. Therefore, Schede extirpates the ureter so far as this can conveniently be done, and sutures its stump in the lower angle of the wound after cureting away the mucous membrane and burning the lumen with the Paquelin cautery. The ureteral stump

is later treated with injections of iodoform, lactic acid, etc. He followed this treatment in 22 cases after extirpation of a tuberculous kidney, and of the 16 patients who recovered not one was troubled with a permanent fistula."

Schede<sup>2</sup> also states: "Whenever primary or secondary nephrectomy is carried out, it is well not to bury the ligated ureter, but to suture it into the wound. One will thus avoid the unpleasant formation of a 'ureteral empyema.' This action is especially necessary when there is obstruction between the kidney and the bladder. Still, suture of the ureter in the wound does not always prevent retention of pus, which will sometimes require total extirpation of the ureter. The daily discharge of a few drops of purulent secretion from such a ureter will give the patient little trouble."

*Technic of Subcutaneous Lumbar Pelvioureteral Implantation.*—After the kidney has been delivered and the renal vessels securely ligated (occasionally it may be necessary to expose the ureter and pelvis and resect before tying the vessels), the kidney is freed from the ureter by cutting across the pelvis at about an inch above its junction with the ureter, thus leaving a funnel-shaped opening into the ureter which must be sutured to the lumbar fascia in such a way that the mouth is not exposed on the skin surface, but opens into the subcutaneous fatty tissue. The flaring of the funnel makes suturing very simple; the introduction of a drainage-tube easy; and the mouth does not contract. When the discharge ceases the skin readily closes over the outlet and buries it, but should pus or mucus reaccumulate, a simple incision through the cuticle releases the pus, and drainage can again be established. Refilling is announced by pain, fever, and bulging at the site of the implanted ureter, but by this method there can be no involvement of the retrocolonic space nor any of the deep structures.

*Vaginal Implantation of the Ureter.*—After nephrec-

tomy for tuberculous kidney, pyonephrosis without ureteral obstruction, it might be well to afford additional drainage and divert the ureteral secretion from the bladder by resection of the vesical end (after introducing a catheter into the ureter), exposing the ureter, through the vaginal wall, cutting across, closing the vesical stump, and suturing the proximal end into the vaginal wound, that the ureter may drain directly into the vagina, where it can do no harm.

Subcutaneous lumbar pelvioureteral implantation appeals to me as being simple, safe, and satisfactory, in that by this procedure we (1) avoid the additional risk of immediate ureterectomy; (2) secure free drainage and maintain an opening through which drugs may be introduced to hasten retrograde changes; (3) on the other hand, the opening being beneath the skin does not prevent primary union; avoids exposure on the skin surface; should mucus or pus accumulate it cannot burrow in the retrocolonic space, is easily recognized and let out through a small skin incision and a tube inserted for drainage; the absence of ligature on the ureter prevents deep inflammation, and if the ureter must for any reason be subsequently removed it can be accomplished without difficulty, from a patient who has had ample time to recuperate from the primary operation. The presence of the drainage-tube in the ureter, with or without the vaginal implantation, does not interfere with the patient in getting out of bed at an early date after operation, nor the exercise of her usual home duties.

The only precaution necessary is to see that the skin opening is not permitted to close so long as the discharge persists, but the presence of a drainage-tube and dressing in no way interferes with the pursuit of the patient's usual vocation, or pleasures. However, if the opening does close and secretion reaccumulates in the ureter, the patient will suffer pain, a rise of temperature, and bulging of the skin over the site of the ureteral opening. A small incision through the cuticle will at once give

relief, and a tiny drainage-tube facilitate the exit of mucus or pus. As atrophic changes in the ureter take place, the secretion will cease and the opening will close permanently.

BIBLIOGRAPHY.

<sup>1</sup> Bull's translation of Von Bergmann's Surgery, vol. v, p. 332.

<sup>2</sup> Loc. cit., p. 292.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

PHYSICS 311

LECTURE 1

MECHANICS

LECTURE 2

LECTURE 3

LECTURE 4

LECTURE 5

LECTURE 6



# American Medicine

---

FOUNDED, OWNED, AND CONTROLLED BY THE  
MEDICAL PROFESSION OF AMERICA.

---

GEORGE M. GOULD, Editor  
G. C. C. HOWARD, Managing Editor

---

Subscription, \$5 a year  
Advertisements limited to 44 pages

---

---

A subscription to American Medicine  
is an endorsement of profes-  
sional journalism.