DOUBLE-BARRELLED CUTANEOUS URETEROSTOMY*

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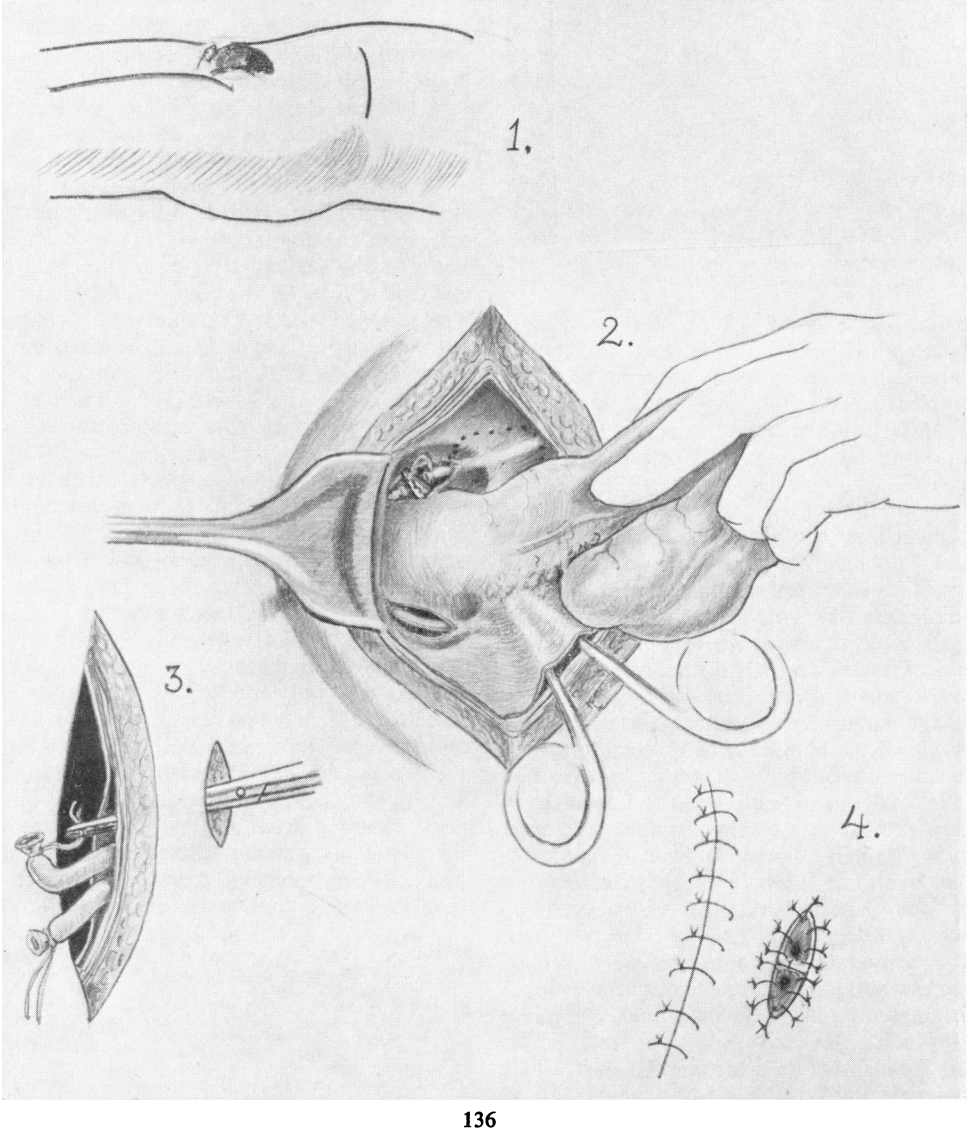
It is a physiological fact that the one anatomical structure which is ideal for gathering and transporting urine within the human body is its own natural urinary pathway.

When the urinary bladder for one reason or another does not function, a combined cutaneous ureterostomy can eliminate many of the complications that arise from the use of the intestine as a substitute for the bladder or urinary ducts. The diagram below illustrates the technique I have used



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in cases where the use of the intestine was impossible or undesirable.

Method

(1) A left-sided transverse incision at the top of the spina iliaca.

(2) Two small incisions are made at the bottom of the pelvis. Both ureters are exposed, ligated and divided close to the bladder. The proximal ureter endings are prepared free subperitoneally up over the edge of the pelvic bone. Entrance is made with a long bent artery forceps, extraperitoneally from the upper or lower edge of the incision, depending on the site selected for ureterostomy, and the ureters are pulled out.

(3) A small, oval incision, the size of a button-hole, is made at the site. A forceps is pushed through the opening, and the musculature is perforated, after which the ureters are pulled out.

(4) The ureterostomy is sewn as a double-barrel.

Double ureterostomy has earlier been introduced by Swenson and Smyth (1959) and by Chute and Sallade (1961). In both these methods the ureterostomy has been placed on the midline beneath the navel. Swenson used a transverse incision, and Chute and Sallade used a lengthwise incision. In both articles different methods are given for the eversion of the ureters to prevent stenosis.

My technique differs from these primarily in the fact that the ureters are led retroperitoneally along the back abdomen wall. In this way larger portions of the anterior abdominal wall are free below the navel. This gives free access to the lower part of the abdomen so that an operation could be performed there in the future, should this prove necessary.

I have not seen any strictures after ureterostomy; perhaps these develop more easily if the ureterostomy is placed in a long incision which would develop more scar tissue. The eversion technique is, however, worth keeping in mind when it comes to this detail.

References

Chute, R. and Sallade, R. L. (1961). Bilateral side-by-side cutaneous ureterostomy in the midline for urinary diversion. *J. Urol. (Baltimore)*, **85**, 280.

Swenson, O. and Smyth, B. T. (1959). Aperistaltic megaloureter: Treatment by bilateral cutaneous ureterostomy using a new technique. Preliminary communication. *ibid.*, **82**, 62.