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Urinary Diversion in Patients with Muscle-Invasive Bladder Cancer and Severe Ureteral Stricture

Radical cystectomy with pelvic lymphadenectomy is considered the standard of care for nonmetastatic muscle-invasive bladder cancer.[1,2] A variety of urinary reconstructions have been described during the urinary diversion. Small intestine or large bowel are used to perform a continent or incontinent pouch in state of bladder. But sometimes, ureters can be used directly for an ureterocutaneostomy. Each technique has its advantages and disadvantages, but the main objective of a diversion is the drainage of the kidneys, and after that, we must also see the appliance and the patient's ability to perform self-catheterization, if necessary. Regardless, surgical benefits should be balanced with possible complications, especially in the elderly.[3] One of the most feared complications is a fistula. In the use of intestinal in urinary diversion, there is also the elimination of mucus which can disturb urine drainage and promotes the formation of stones and metabolic disorder.[4,5]

The other means of diversion is the ureterocutaneostomy. To avoid stenosis, it requires the permanent placement of an endoureteric stent, which must be changed periodically, and a bilateral ostomy appliance, which is not very comfortable for the patient. Hence, Bricker transileal ureterocutaneostomy approach avoids this inside the permanent ureteral stent and the bilateral appliance.[6] In our practice, we see advanced bladder cancer and uterine cervical tumors infiltrating the bladder trigone, and we perform the Bricker most of the time. Disease extent and anatomical considerations, therefore, limit reconstructive options. Ileal conduits represent the fastest, easiest, least complication-prone, and most commonly performed urinary diversion. The patient, in this Bricker's procedure, has one urinary diversion and external stoma, and there is no risk of skin stenosis.

This article by Chiancone's *et al*.[7] describes a new surgical technique. This is another alternative when the length of the ureter does not allow its use. The method of calculation, sampling, and tubulization of this pedicled skin graft has been well described and illustrated with explanatory figures. In their study, Chiancone emphasize that this patient already had an emergency nephrostomy for obstructive uropathy. The question is, did the ureteric stricture already exist at that time? Didn't this have an impact on the length of the ureter remaining usable? With a 36 months' follow-up, the author puts forward a satisfactory result with the absence of urinary leaks or fistula or anastomotic stenosis, while leaving Bracci ureteral splints in place.

This new technique still requires bilateral appliances. In addition to follow-up the bladder cancer, this urinary diversion would also require surveillance of the functionality of the skin graft: what about the risk of skin degeneration, the risk of stone encrustation, long-term stenosis, and the risk of infection related to commensal skin germ skin flora such as *Staphylococcus aureus* and *Streptococcus* spp.[8]

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Conflicts of interest

There are no conflicts of interest.

Compliance with ethical principles

Not applicable.

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