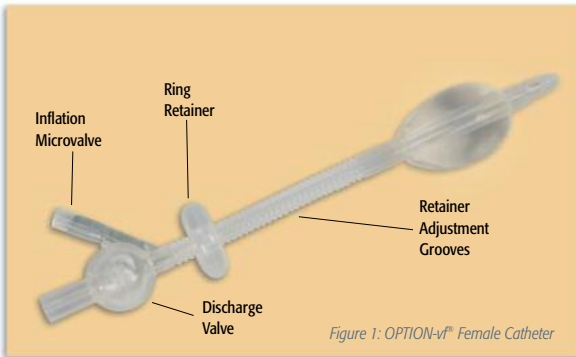


Bagless Urinary Catheters Offer a Welcomed Option

F. Nery Flores, MD, FACS



Few substantial innovations have been made in urinary drainage devices over the past several decades despite the ubiquitous use of indwelling urinary catheters. A recently available alternative to the Foley catheter-and-bag system provides a more elegant solution that the physician may offer his/her post-surgical and other urinary management patients. These new “bagless” alternatives,

usually actuated to provide “on demand” drainage of urine from the bladder. (Figure 3)

The potential applications for valved catheters are numerous. Beneficial use in our institution has initially been for common post-procedural catheterization, relief of acute urinary retention (AUR), and as a preferred alternative to the use of Foley catheter caps or plugs. Table 1 lists some of our typical uses

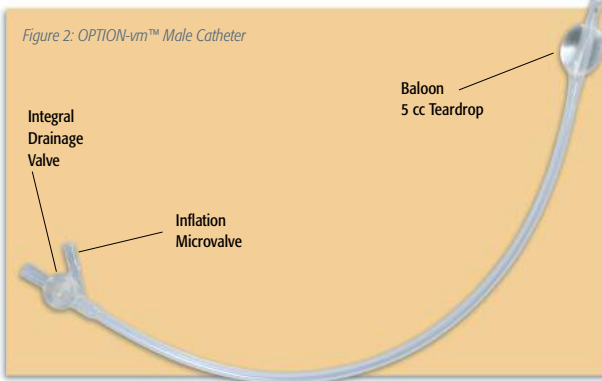
for whom continuous drainage is a clinical requirement. (Note that the valved catheters may be used with an available Continuous Drainage Adaptor (CDA) [Figure 4] that allows the catheters to continuously drain into a standard urine bag when bladder filling is not initially desirable.)

Benefits derived from the use of valved catheters are greatly appreciated by patients, and experience with the catheters in our institution has been overwhelmingly positive. The benefits most often noted by patients and staff are listed in Table 2.

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problems of emptying, cleaning, odor and urine leakage. Patients who are familiar with the discomfort and morbidity that can be associated with leg straps and catheter traction, especially with full urine bags, often note improved comfort.¹ Female patients are particularly vocal about the sense of dignity that they enjoy from the valved catheter because of how self-conscious they would otherwise be about the urine bag. Our experiences parallel the significant benefits shown in a controlled clinical study of female catheter patients who reported uniformly more favorable ratings of the OPTION-v[®] valved catheter compared to Foley catheter systems with respect to comfort, mobility, self-consciousness, sleep disruption, and the ability to shower and get dressed.²



the OPTION-v[™] series Valved Urinary Catheters, are disposable, 100% silicone, gender specific devices. (Figures 1 and 2)

The OPTION-v[™] series Valved Urinary Catheters are used to provide controlled drainage of urine without the need for urine collection bags and tubes. Unlike Foley systems, these all-silicone catheters incorporate a teardrop-shaped retention balloon that “seals” at the bladder neck to allow urine storage within the patient’s own bladder, and an external drainage valve that is man-

ually actuated to provide “on demand” drainage of urine from the bladder.

We have found that nearly all patients can effectively squeeze the drain valve and that most find it much more manageable and desirable than emptying drain bags or learning intermittent catheterization. Because the catheter function includes normal bladder cycling and requires periodic manual drainage by the patient or caretaker, patient selection should exclude those with severe arthritis, patients without the physical or cognitive capacity to operate the valve, and those



Figure 3: Actuation of Valve to Drain Bladder

In addition to patient benefits, we have noted several clinical advantages associated with valved catheter use. In contrast to continuous drainage, and like intermittent catheterization, valved catheters maintain normal bladder cycling, thus we have observed a decrease in frequency and urgency reported by valved catheter patients. We have also noted no increase in infection related to valved catheter use, again confirming previous clinical study findings.² Other practical benefits include increased patient satisfaction and resumption of normal activities, reduced potential for urine bag-related falls or injury, and reduced staff time expenditure for patient training as compared to traditional urinary management methods.

In summary, our experiences with “bag-less” urinary catheters have demonstrated their substantial clinical and quality of life benefits, and have shown valve catheter use to be an attractive alternative to standard management methods. With the increasing awareness and availability of this preferred option, we anticipate broad adoption of valved catheter use for a wide variety of inpatient and outpatient applications. One option that should be explored is the use of this catheter as an indwelling suprapubic tube in selected patients.

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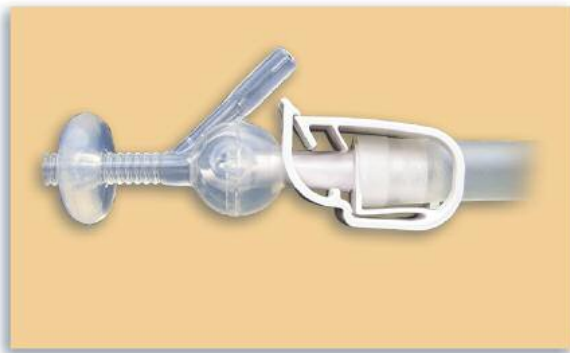


Figure 4: Continuous Drainage Adaptor

PROCEDURE OR CONDITION	PATIENT GENDER
Genitourinary Incontinence Surgery (Slings, Urethropexy, etc.)	Female
Cystocele and Rectocele Repair	Female
BPH Procedures (TUMT, TUNA, PVP, Laser, etc.)	Male
Prior to TURP in patient with urinary retention (Increase bladder capacity before surgery.)	Male
Other Urinary Tract Procedures (Bladder neck contracture release, ablation of bladder neck, optical urethrotomy.)	Both
Acute Urinary Retention	Both
Short-Term Urinary Management (Wheelchair patients – MS, SCI, etc.)	Both
Urodynamics (Retention Following Bulking Procedures)	Both (predominantly female)

Table 1: Initial Valved Catheter Applications

VALVED CATHETERS – NOTED BENEFITS	
Greater Mobility	patients described resuming more normal movement and activities without the urine bag
Improved Comfort	patients described improved comfort with valved catheters and noted the absence of catheter pulling and strap discomfort
Reduced Sleep Disruption	patients reported getting better sleep attributed to “tether” elimination, and said that draining their bladders during the night was preferable to bag-related discomfort
Ease of Use	patients had no problems squeezing the drain valve, and preferred avoiding self catheterization or bag emptying and cleaning
Safety	staff noted the safety aspect of eliminating the tube and bag as an addition to improved patient mobility
Dual Function	staff also noted the convenience of the optional adaptor (CDA) for continuous drainage
Bladder Cycling	also noted, frequency/urgency benefit upon removal of valved catheters – attributed to maintained urinary cycling

Table 2: Valved Catheter Benefits