

Author Year; Country Score Research Design Sample Size	Methods	Outcome
<p>van der Merwe et al. 2012; South Africa Case series N=28</p>	<p>Population: 28 male patients with neuropathic bladder dysfunction after SCI who had dual flange Memokath stents inserted in the period March 2008 to October 2011; Age in yrs: mean 37.4, range 23-64; Level of injury: 23 cervical, 5 thoracic. Treatment: Stents were placed rather than performing an external sphincterotomy in selected patients. With the patient under deep general anesthesia, a thermosensitive expandable metallic stent was positioned over the internal and external urethral sphincters; patients were followed-up at 1 month and again between 3 and 6 months. Outcome Measures: stent failure rate, incidence of AD post-stent placement, complications.</p>	<ol style="list-style-type: none"> 1. 33 stents were placed in 28 patients. 2. 6 patients reported severe autonomic dysreflexia related to poor bladder emptying as their reason for stent placement. 3. Severe AD decreased significantly from 17 cases before stent placement to 7 after stent placement. 4. New severe AD was a complication of stent placement in one case, after which the stent was removed.
<p>Ke & Kuo 2010; Taiwan Case series N=22</p>	<p>Population: 19 males; 13 subjects with cervical SCI, 9 with thoracic SCI. 17 subjects reported AD. Mean age at diagnosis of BND = 46.7 years. Lower urinary tract symptoms experienced for mean of 3.8 years. Treatment: transurethral incision of the bladder neck (TUI-BN) Outcome Measures: urodynamic parameters; satisfactory outcome (increase of AUA/IPSS quality-of-life index score by ≥ 2); autonomic dysreflexia occurrence; spontaneous voiding; detrusor pressure; post void residual; Qmax; bladder outlet resistance.</p>	<ol style="list-style-type: none"> 1. Spontaneous voiding resumed in 19 patients, persistent urinary retention in 3 patients. 2. Urodynamic parameters: For patients with a Pdet > 15cmH₂O at baseline, after surgery: Pdet and PVR decreased, Qmax increased significantly from 3.7(5.7) to 8.3(5.4)mL/sec; For patients with a Pdet \leq15cmH₂O at baseline, after surgery: Pdet and Qmax increased, PVR decreased significantly from 369(160) to 117(136)mL. 3. Degree of AD during micturition was less severe or disappeared in 15 patients (88.2%) after surgery. 4. 18 (82%) patients reported satisfactory improvement in QoL index after TUI-BN, and voiding by volitional drills or lower abdominal tapping maneuvers became easier.
<p>Perkash 2007; USA Case series N=46</p>	<p>Population: 46 males; 31 subjects with tetraplegia and 15 with paraplegia; Type of injury: 43 AIS A and B, 3 AIS C. Treatment: Transurethral sphincterotomy (TURS). Outcome Measures: Autonomic dysreflexia during cystometrogram (measures the contractile force of the bladder when voiding), blood pressure.</p>	<ol style="list-style-type: none"> 1. During cystometrogram, mean maximal systolic pressure was 160(23) pre and 108(17) mmHg post. Mean diastolic pressure was 88(15) pre and 62(11) mmHg post. 2. Mean decrease in systolic BP and diastolic BP after TURS was 55(26) and 30(17) mmHG, respectively. 3. Amelioration in symptoms of AD. 4. Mean post-void residual urine decreased significantly from 233(152) to 137(0.35) mL after TURS. 5. 4 patients still exhibited AD within 1 year of laser TURS.
<p>Seoane-Rodriguez et al. 2007; Spain</p>	<p>Population: 47 males; 32 subjects with cervical, 11 with thoracic, and 4 with lumbar injuries; mean post-injury</p>	<ol style="list-style-type: none"> 1. Decrease in symptomatic UTI by 25%. 2. Decrease in post void residual urine volume by an average of 224.3 cm³.

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Case series N=47	time to stenting was 103.8 months. Mean follow-up time from implantation 67 months. Type of injury: 36 AIS A; 4 AIS B and 7 AIS C. Treatment: intraurethral stent. Outcome Measures: Urodynamic parameters; presence or absence of symptomatic UTI; autonomic dysreflexia; appearance of complications of the upper urinary tract (UUT); bladder management before and after surgery; prosthesis complications.	<ol style="list-style-type: none"> 3. Episodes of dysreflexia decreased from 35.1% to 16.2%. 4. Complications in the UUT decreased from 46.8 to 23.4%. 5. Urodynamic study showed an average reduction of 44.4 cm³ H₂O in the maximum detrusor pressure. 6. Most frequent stent complication was displacement, followed by stenosis, lithiasis (pathological formation of mineral concentrations in the body), and intraprosthesis calcification. 8.5% required stent removal.
Sidi et al. 1990; USA Pre-post N=12	Population: 9 subjects with complete SCI, 3 with incomplete injuries; Level of Injury: C5-T11; 2-27 years post-injury. Treatment: augmentation enterocystoplasty. Outcome Measures: functional bladder capacity, levels of blood urea nitrogen, creatinine, electrolytes.	<ol style="list-style-type: none"> 1. By 4 months post-op, 11/12 patients were totally continent on clean intermittent self-catheterization every 4-6 hours. 2. Of the 3 patients who had an artificial urinary sphincter, 2 became continent after sphincter activation and 1 had achieved continence without sphincter activation. No patients experienced symptoms of AD during intermittent catheterization post-operatively.
Barton et al. 1986; USA Case series N=16	Population: 5 subjects with thoracic, and 8 with cervical injuries, 47-285 months post-injury. Treatment: modified transurethral external sphincterotomy with follow-up to 26 weeks. Outcome Measures: bladder and urethral pressures and volumes, blood pressures.	<ol style="list-style-type: none"> 1. Intravesical and urethral pressures decreased compared to before sphincterotomy. 2. Blood pressure responses decreased during urodynamic stimulation. 3. Other cardiovascular responses related to AD during bladder filling markedly attenuated.