Hypothesis / aims of study
Latissimus Dorsi Detrusor Myoplasty (LDDM) has been proven to be a viable option for the treatment of patients with an acontractile bladder caused by traumatic, idiopathic or congenital lower motor neuropathy [1]. We report the clinical long-term results of our multicenter study.

Study design, materials and methods
From 05/2001 through 02/2008, a total of 24 patients (mean age: 37 years; range: 14-63; 15 males, 9 females) in four clinical centers were enrolled. The preoperative evaluation of the patients included urethrocystoscopy, intravenous pyelography and electromyography of the rectus abdominis muscle. The preoperative urodynamic assessment showed acontractile bladder in all patients requiring complete clean intermittent catheterization (CIC) 4-8 times per day. Postoperative follow-up ranged from 8-89 months (mean: 46 months) and was carried out by questionnaire and measurement of post-voided residual urine volume.

Results
16 of the 24 patients gained complete control of spontaneous micturition and do not require further CIC, with post-voided residual urine volumes from 0-100ml. In three patients, the frequency of CIC was reduced from 5-6 times per day preoperatively to 2-3 times per day postoperatively, with post-voided residual urine volumes from 150-250ml. In one female patient with spontaneous micturition three months postoperatively, CIC is currently required five times per day because of recurrent urinary tract infections and persistent urethral pain. At present, 4 patients need CIC 4-6 times per day as was necessary preoperatively. Two of them no longer suffer from recurrent urinary tract infections. No functional restrictions or chronic pain of the upper extremity were observed in any patient.

Interpretation of results
In the majority of cases voiding function could successfully be restored by LDDM thereby eliminating the need for catheterization to empty the bladder.

Concluding message
This multicenter study confirms that LDDM is an effective treatment option in patients with acontractile bladder.

References