

## Treatment of Detrusor Underactivity (DU) with StarFormer<sup>®</sup>

Toshihide Miyauchi, MD

Introduction:

Detrusor underactivity (DU, underactive/acontractile detrusor) is a condition in which the bladder does not contract sufficiently or not at all during voiding, despite the patient's desire to urinate, resulting in residual urine after voiding. It is most common in peripheral nerve and spinal cord lesions and is very rare in brain lesions. Treatment for hypoactivity of the voiding muscles is the same as for neurogenic bladder, with the addition of medication for benign prostatic hyperplasia (BPH) for males, but it is not uncommon for patients to be refractory to treatment. We report a case here in which the symptoms of dysuria disappeared, and the amount of residual urine decreased markedly with the use of StarFormer<sup>®</sup>.

System	StarFormer <sup>®</sup> PRO
Energy	High Intensity Tesla Magnetic Stimulation (HITS™)
Mode	IntimaWave®
Program	Urinary Incontinence
Channel	A (Chair Seat) + B (Chair Back)
Time	30 min
Intensity	Channel A (Chair Seat): average 65%; Channel B (Chair Back): average 70%
Sessions	16 sessions (8 sets x 2) in 3 months



Dr Toshihide Miyauchi completed his medical degree from Oita Medical University, Japan in 2003. In year 2005 he joined in Urological Hospital Oita in Japan. He became Vice President in 2012 in Oita Hospital. Between 2020–2021 he was selected for Best Doctor in Japan. In 2021 he began his practice with StarFormer in Urogynecological and Urological treatment.

## CLINICAL CASE:

84-year-old woman. Interval: 1st set of 8 sessions: Twice a week, 2nd set of 8 sessions: Once a week.

Nov. 2020: Patient came to the hospital complaining of severe dysuria since a week earlier, frequent urination every hour during the previous night, and insomnia.

Ultrasonography: right renal cyst, no abnormal findings in left kidney or bladder, PVR 291 ml.

Urine sample: WBC 50-99/f Cloudy+.

Diagnosis: Incomplete urinary retention + UTI.

Admitted to the hospital with balloon catheter placed.

Medication (ebulantil (TSUMURA Keishibukuryogan Extract Granules for Ethical Use) 15 mg x2 capsules, twice a day, distigmine 5 mg x1 tablet once a day) started.

Dec 2020: Improvement to 120 ml residual urine, but persistent severe dysuria.

Inability to urinate without sitting for 10 minutes.

Feb 2021: Residual urine 328 ml.

Explained future clean intermittent self-catheterization (CIC) or balloon catheter management.

Jun - Aug 2021: StarFormer Treatment: IntimaWave mode/Urinary incontinence Program, 30 min x 16 sessions / twice a week.

Aug 2021: Dysuria improved, Residual urine 173 ml.

Nov 2021: Dysuria disappeared, Residual urine 63 ml.

Medication was stopped and the patient is still under observation.

Published by the Laser and Health Academy. All rights reserved. © 2022

Disclaimer: The intent of this Laser and Health Academy publication is to facilitate an exchange of information on the views, research results, and clinical experiences within the medical laser community. The contents of this publication are the sole responsibility of the authors and may not in any circumstances be regarded as official product information by the medical equipment manufacturers. When in doubt please check with the manufacturers whether a specific product or application has been approved or cleared to be marketed and sold in your country.

