

# MANAGEMENT OF LOWER URINARY TRACT (LUT) OF STROKE PATIENTS IN THE ACUTE AND SUBACUTE PHASE

**Avgoustinos Kampas, Angeliki Paraschou, Raisa Styliadi,  
Christina Ziagka, Pagonntini Chatzidimitriou, Athanasios Tsivgoulis,  
Konstantina Petropoulou**

Attica Rehabilitation Center, Greece  
e-mail: [aggeliki.paraschou@gmail.com](mailto:aggeliki.paraschou@gmail.com)

## Background and Aims

Stroke patients often present urinary dysfunction and symptoms of incomplete bladder voiding, urgency and incontinence. Inappropriate management of the lower urinary tract can lead to several complications. Purpose: The study aims to demonstrate the importance of early LUT management and the removal of indwelling catheter towards a normalized function of the sphincter-bladder unit and a positive rehabilitation program outcome.

## Methods

We studied 47 stroke patients, 17 female and 30 male, that were hospitalized in our rehabilitation clinic for the interval of 60 days (September 2024-October2024). Before removing the indwelling catheter, a thorough assessment of the LUT and cognitive function, of the perineal reflexes and sensibility was performed, taking also into account the prostate function of male patients as well as urinary tract ultrasound, urine analysis and urine culture. Antimuscarinic and a-blockers drugs were administered and the indwelling catheter was safely removed according to our clinic protocol.

## Results

25 out of 47 patients had their catheter removed 7-15 days after admission for rehabilitation under a-blockers medication and antimuscarinic drugs that were ceased when voluntary micturition with low post micturition urine volume was achieved. Unsuccessful catheter removal was analyzed per patient case.

## Conclusion

The early removal of the indwelling catheter of stroke patients can lead to a normalized LUT function and at the same time allows an unburdened rehabilitation program including hydrotherapy, having positive effect on the cerebral function assuring continence.

**Keywords:** Lower, urinary, tract, Cerebral, stroke