

Figure 2: Initial care of the patient with neurogenic lower urinary tract dysfunction.

CLINICAL ASSESSMENT

- History-taking: Covering urinary, neurological (e.g. mobility, hand function, cognition), bowel and sexual symptoms. Also including medication, social support and lifestyle.
- Examination: General, abdominal, vaginal/rectal (as indicated), focused neurological assessment (e.g. testing sacral reflexes, mobility, hand function, cognitive abilities).

INITIAL INVESTIGATIONS (TAILORED TO INDIVIDUAL CIRCUMSTANCES)

- Fluid input/urine output frequency and volume chart.
- Urine dipstick test with culture and bacterial sensitivity testing if positive or symptoms suggesting active infection.
- Residual urine volume measurement.
- Flow rate measurement (in patients with preservation of voluntary bladder emptying).

PATIENT AT HIGH RISK OF UPPER URINARY TRACT COMPLICATIONS?

- As a result of their particular neurological condition (e.g. spinal cord injury, myelomeningocele [spina bifida], cauda equina syndrome).
- As a result of their clinical presentation (e.g. large residual urine volume, recurrent urinary tract infections).

YES

NO

Arrange imaging of the upper urinary tract (e.g. renal ultrasound scan).

RED FLAG SIGNS OR SYMPTOMS PRESENT?

- Haematuria, loin pain, recurrent urinary tract infection, recurrent catheter blockages, hydronephrosis or stones on renal imaging, biochemical evidence of renal deterioration.

YES

NO

Arrange urgent investigation and management as indicated by the patient's signs or symptoms.

Organise care with an appropriate multidisciplinary team – Please see algorithm on management within an appropriate multidisciplinary team