**DIAGNOSTIC EVALUATION:**

- **Patient history and physical examination:** When diagnosing neuro-urological symptoms, the aim is to describe the type of dysfunction involved. A medical history, physical examination and bladder diary are mandatory before any additional diagnostic investigations. Early diagnosis and treatment are essential in both congenital and acquired neuro-urological disorders.

- **Urodynamics:** Urodynamic investigation is the only method that can objectively assess the (dys)function of the LUT. Video-urodynamics is the optimum procedure for urodynamic investigation in neuro-urological disorders. Specific uro-neurophysiological tests are elective procedures and should only be carried out in specialised settings.

- **Renal function:** In many patients with neuro-urological disorders, the upper urinary tract (UUT) is at risk, particularly in patients who develop high detrusor pressure during the filling phase. Periodically assess renal function in at-risk patients.

**DISEASE MANAGEMENT:**

The primary aims for treatment of neuro-urological symptoms, and their priorities, are: protection of the UUT, achievement (or maintenance) of urinary continence; restoration of LUT function and improvement of the patient’s quality of life (QoL).

**1. NON-INVASIVE CONSERVATIVE TREATMENT:**

- **Assisted bladder emptying -** Credé manoeuvre, Valsalva manoeuvre, triggered reflex voiding: Incomplete bladder emptying is a serious risk factor for infection, high intravesical pressure and incontinence. Methods to improve the voiding process should therefore be practiced.

- **Neuro-urological rehabilitation:** To date, bladder rehabilitation techniques are mainly based on electrical or magnetic stimulation; however, there is a lack of well-designed studies.

- **Drug treatment:** A single, optimal, medical therapy is not always available. Commonly, a combination of different therapies is advised to prevent urinary tract damage and improve long-term outcomes, particularly in patients with a suprasacral spinal cord injury (SCI) or multiple sclerosis (MS).

**2. MINIMALLY INVASIVE TREATMENT:**

- **Intermittent catheterisation** is the standard treatment for patients who are unable to empty their bladder. Indwelling transurethral catheterisation and suprapubic cystostomy are associated with a range of complications as well as an enhanced risk for urinary tract infection (UTI).

- **Intervasical drug treatment:** A significant reduction in adverse events was observed for intravesical administration of oxybutynine compared to oral administration.

- **Botulinum toxin injections in the bladder:** Botulinum toxin A has been proven effective in patients with neuro-urological disorders due to MS or SCI. Bladder neck incision is indicated only for secondary changes (fibrosis) at the bladder neck.

**3. SURGICAL TREATMENT:**

There is considerable heterogeneity in outcome parameters and definitions of cure used to report on outcomes of surgical interventions for SUI in neuro-urological patients.

**4. URINARY TRACT INFECTION IN NEURO-UROLOGICAL PATIENTS:**

- **Do not screen for or treat asymptomatic bacteriuria in patients with neuro-urological disorders.**

- **Avoid the use of long-term antibiotics for recurrent urinary tract infections (UTIs).**

- **In patients with recurrent UTIs, optimise treatment of neuro-urological symptoms and remove foreign bodies (e.g., stones, including catheters) from the urinary tract.**

- **Individualise UTI prophylaxis in patients with neuro-urological disorders as there is no optimal prophylactic measure available.**