

**Table 1** Diagnostic evaluation of neurogenic lower urinary tract dysfunction

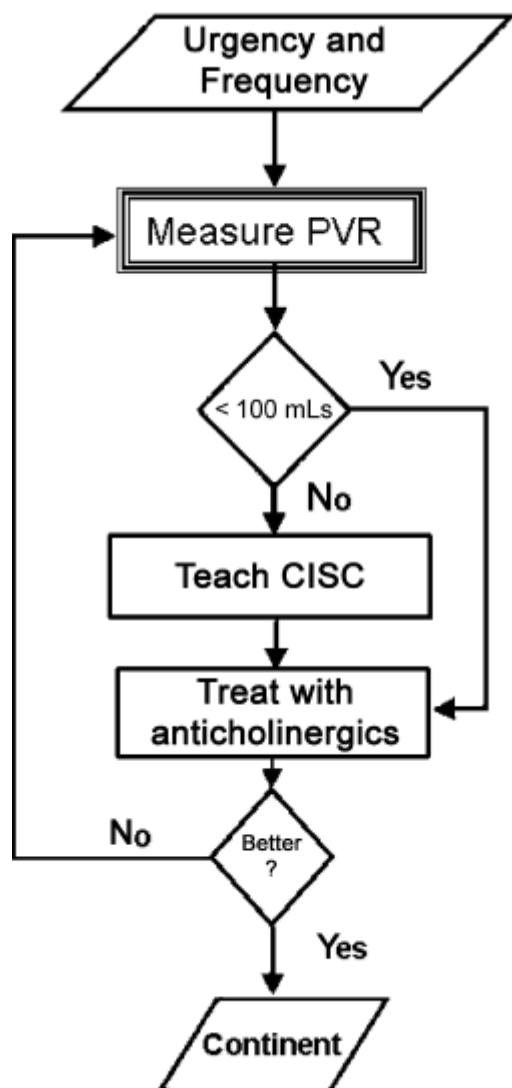
<b>Lesion site</b>	<b>Reported symptoms</b>	<b>Findings in cystometry</b>	<b>Examples</b>
Suprapontine lesion	Urgency, frequency, urgency incontinence	Detrusor overactivity	Stroke (17) Parkinson's disease (18) Multiple sclerosis (19)
Infrapontine suprasacral lesion	Urgency, frequency, urgency incontinence, hesitancy, retention	Detrusor overactivity, Detrusor-sphincter dyssynergia	Multiple sclerosis (19) Multiple System Atrophy (20)
Infrasacral lesion	Hesitancy, retention	Detrusor underactivity, sphincter insufficiency	Cauda equina syndrome (21) Peripheral neuropathy (22)

**Table 2** Situations where early referral to a specialist urology service is indicated

Recurrent urinary tract infections
Haematuria
Suspicion of concomitant pathologies such as prostate enlargement or stress incontinence
Consideration for intradetrusor injections of botulinum toxin A
Consideration for suprapubic catheter
Pain of presumably upper urinary tract origin
Renal impairment

**Table 3** Commonly used antimuscarinic agents presented in alphabetical order

Generic name	Trade name	Daily dose (mg)	Frequency	Selective receptor binding (M3:M1 affinity ratio)
Darifenacin Controlled release	Emselex	7.5-15	od	Mainly M3(9:3:1)
Fesoterodine Controlled release	Toviaz	4-8	od	Not subtype selective
Oxybutynin Immediate release	Ditropan, Cystrin	2.5–20	bd–qds	Not subtype selective
Controlled release	Lyrinel XL	5–20	od	
Transdermal patch	Kentera	36 mg (3.9 mg/24 h)	One patch twice weekly	
Propiverine Immediate release Controlled release	Detrunorm	15–60	od–qds	Not subtype selective
Solifenacin Controlled release	Vesicare	5–10	od	Mainly M3(2:5:1)
Tolterodine Immediate release Controlled release	Detrusitol Detrusitol XL	2–4	bd	Not subtype selective
Tropium chloride Immediate release Controlled release	Regurin	20–40	bd (before food)	Not subtype selective



**Figure 1** Algorithm for management of neurogenic lower urinary tract dysfunction in patients with progressive neurological disorders

Requires permission from the BMJ Publishing Group (*J Neurol Neurosurg Psychiatry* 2009; 80:470-7).

CISC, clean intermittent self-catheterisation; PVR, postvoid residual volume; UTI, urinary tract infection.