Table 1 Diagnostic evaluation of neurogenic lower urinary tract dysfunction

Lesion site	Reported symptoms	Findings in cystometry	Examples
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	Emselex	7.5-15	od	Mainly M3(9·3:1)
Controlled release				
Fesoterodine	Toviaz	4-8	od	Not subtype selective
Controlled release				
Oxybutynin				Not subtype selective
Immediate release	Ditropan, Cystrin	2.5–20	bd-qds	
Controlled release	Lyrinel XL	5–20	od	
Transdermal patch	Kentera	36 mg (3.9 mg/24 h)	One patch twice weekly	
Propiverine	Detrunorm	15–60	od–qds	Not subtype selective
Immediate release				
Controlled release				
Solifenacin	Vesicare	5–10	od	Mainly M3(2·5:1)
Controlled release				
Tolterodine		2–4	bd	Not subtype selective
Immediate release	Detrusitol			
Controlled release	Detrusitol XL			
Trospium chloride	Regurin	20–40	bd (before food)	Not subtype selective
Immediate release				
Controlled release				

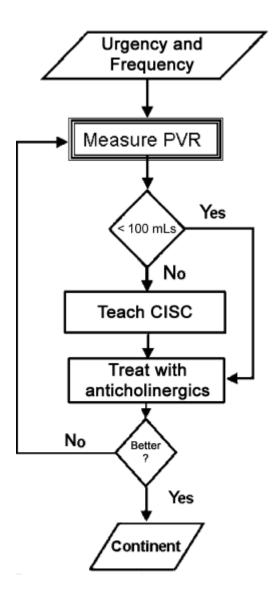


Figure 1 Algorithm for management of neurogenic lower urinary tract dysfunction in patients with progressive neurological disorders

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