

GUIDELINES ON CHRONIC PELVIC PAIN

(Complete text update February 2012)

D. Engeler (chairman), A.P. Baranowski, S. Elneil, J. Hughes,
E.J. Messelink, A. van Ophoven, P. Oliveira,
A.C. de C. Williams

Eur Urol 2004;46(6):681-9

Eur Urol 2010;57(1):35-48

This pocket version aims to synthesise the important clinical messages described in the full text and is presented as a series of 'graded 'action based recommendations', which follow the standard for levels of evidence used by the EAU (see Introduction chapter full text guidelines).

Figure 1: an algorithm for diagnosing and managing CPP

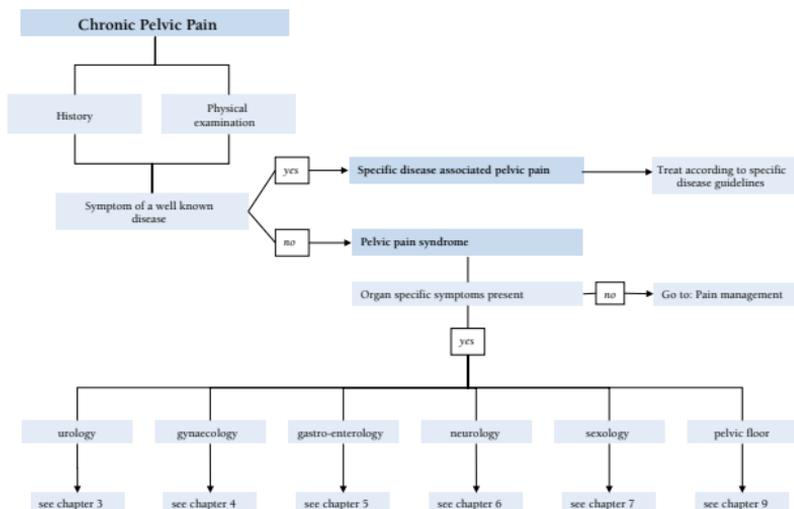


Figure 2: an algorithm for pain management

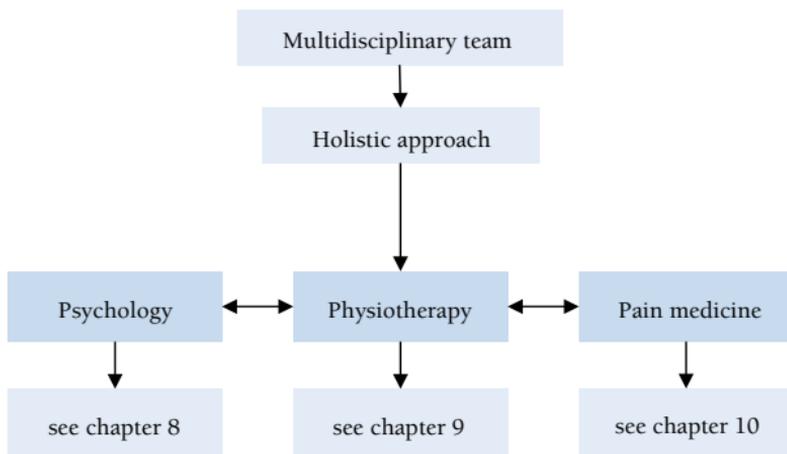


Table 1: Classification of chronic pelvic pain syndromes

Axis I Region		Axis II System	Axis III End organ as pain syndrome as identified from Hx, Ex and Ix
Chronic pelvic pain	Specific disease associated pelvic pain OR Pelvic pain syndrome	Urological	Prostate
			Bladder
			Scrotal Testicular Epididymal
			Penile Urethral
			Post-vasectomy
		Gynaecological	Vulvar Vestibular Clitoral
			Endometriosis associated
			CPPS with cyclical exacerbations
			Dysmenorrhoea
		Gastrointestinal	Irritable bowel
			Chronic anal
			Intermittent chronic anal
		Peripheral nervers	Pudendal pain syndrome
		Sexological	Dyspareunia
			Pelvic pain with sexual dysfunction
		Psychological	Any pelvic organ
		Musculo-skeletal	Pelvic floor muscle Abdominal muscle Spinal
			Coccyx

Axis IV Referral characteristics	Axis V Temporal characteristics	Axis VI Character	Axis VII Associated symptoms	Axis VIII Psychological symptoms
Suprapubic Inguinal Urethral Penile/clitoral Perineal Rectal Back Buttocks Thighs	ONSET Acute Chronic ONGOING Sporadic Cyclical Continuous TIME Filling Emptying Immediate post Late post TRIGGER Provoked Spontaneous	Aching Burning Stabbing Electric	UROLOGICAL Frequency Nocturia Hesitance Dysfunctional flow Urge Incontinence GYNAECOLOGICAL Menstrual Menopause GASTROINTESTINAL Constipation Diarrhoea Bloating Urge Incontinence NEUROLOGICAL Dysaesthesia Hyperaesthesia Allodynia Hyperalgesia SEXUOLOGICAL Satisfaction Female dyspareunia Sexual avoidance Erectile dysfunction Medication MUSCLE Function impairment Fasciculation CUTANEOUS Trophic changes Sensory changes	ANXIETY About pain or putative cause of pain Catastrophic thinking about pain DEPRESSION Attributed to pain or impact of pain Attributed to other causes Unattributed PTSD SYMPTOMS Re-experiencing Avoidance

Figure 3: phenotyping and assessment algorithm for CPP

Phenotyping	Assessment
Urology	Urinary flow, micturition diary, cystoscopy, ultrasound, uroflowmetry
Psychology	History of negative experiences, important loss, coping mechanism, depression
Organ specific	Ask for gynaecological, gastro-intestinal, ano-rectal, sexual complaints Gynaecological examination, rectal examination
Infection	Semen culture and urine culture, vaginal swab, stool culture
Neurological	Ask for neurological complaints (sensory loss, dysaesthesia). Neurological testing during physical examination: sensory problems, sacral reflexes and muscular function
Tender muscle	Palpation of the pelvic floor muscles, the abdominal muscles and the gluteal muscles

UROLOGICAL ASPECTS OF CHRONIC PELVIC PAIN

PROSTATE PAIN SYNDROME

Recommendations: assessment and diagnosis prostate pain syndrome (PPS)	GR
Specific diseases with similar symptoms must be excluded. It is therefore recommended to adapt diagnostic procedures to the patient and to aim at identifying them.	A
After primary exclusion of specific diseases, patients with symptoms according to the above definition should be diagnosed with PPS.	A
A validated symptom and quality of life scoring instrument, such as the NIH-CPSI, should be considered for initial assessment as well as for follow-up.	B

It is recommended to assess PPS associated negative cognitive, behavioural, sexual, or emotional consequences, as well as symptoms of lower urinary tract and sexual dysfunctions.	B
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---

Recommendations: treatment of prostate pain syndrome (PPS)	GR
Consider multimodal and phenotypically directed treatment options for PPS.	B
Alpha-blockers are recommended for patients with a duration of PPS < 1 year.	A
Single use of antimicrobial therapy (quinolones or tetracyclines) is recommended in treatment-naïve patients over a minimum of 6 weeks with a duration of PPS < 1 year.	A
NSAIDs are recommended for use in PPS, but long-term side effects have to be considered.	B
Allopurinol is not recommended for use in PPS.	B
Phytotherapy might be used in patients with PPS.	B
Consider high-dose pentosan polysulphate to improve symptoms and quality of life in PPS.	A
Pregabalin is not recommended for use in PPS.	A
Perineal extracorporeal shock wave therapy might be considered for the treatment of PPS.	B
Electroacupuncture might be considered for the treatment of PPS.	B
Posterior tibial nerve stimulation might be considered for the treatment of PPS.	B
TUNA of the prostate is not recommended for the treatment of PPS.	B

For PPS with significant psychological distress, psychological treatment focussed on PPS should be attempted.	B
---------------------------------------------------------------------------------------------------------------	---

Figure 4: assessment and treatment algorithm for PPS

Assessment	Treatment	
Urine culture	Grade A recommended	Alpha-blockers when duration is < 1 year
Uroflowmetry		Single use antibiotics (6 weeks) when duration is < 1 year
Transrectal US prostate		High dose Pentosan polysulfate to improve QoL and symptoms
NIH-CPSI scoring list	Grade B recommended	NSAID's. Be aware of long-term side effects
Phenotyping		Phytotherapy
Pelvic floor muscle testing		Perineal extracorporeal shockwave therapy
		Electroacupuncture
	Not recommended	Percutaneous tibial nerve stimulation (PTNS)
		Psychological treatment focused on the pain
		Allopurinol [B]
		Pregabalin [A]
		TransUrethral Needle Ablation (TUNA) [B]

BLADDER PAIN SYNDROME

Table 2: ESSIC classification of types of BPS according to the results of cystoscopy with hydrodistension and biopsies

	Not done	Cystoscopy with hydrodistension		
		Normal	Glomerulations ^a	Hunner's lesion ^b
Biopsy				
Not done	XX	1X	2X	3X
Normal	XA	1A	2A	3A
Inconclusive	XB	1B	2B	3B
Positive ^c	XC	1C	2C	3C

^aCystoscopy: glomerulations grade 2–3

^bLesion per Fall's definition with/without glomerulations

^cHistology showing inflammatory infiltrates and/or detrusor mastocytosis and/or granulation tissue and/or intrafascicular fibrosis

Recommendations: assessment and diagnosis bladder pain syndrome (BPS)	GR
Specific diseases with similar symptoms have to be excluded. It is therefore recommended to adapt diagnostic procedures to each patient and aim at identifying them.	A
After primary exclusion of specific diseases, patients with symptoms according to the above definition should be diagnosed with BPS by subtype and phenotype.	A

A validated symptom and quality of life scoring instrument should be considered for initial assessment as well as for follow-up.	B
BPS associated non bladder diseases should be assessed systematically.	A
BPS associated negative cognitive, behavioural, sexual, or emotional consequences should be assessed.	A

Recommendations	GR
Subtype and phenotype-oriented therapy for BPS is recommended.	A
Multimodal behavioural, physical and psychological techniques should always be considered alongside oral or invasive treatments for BPS.	A
Opioids might be used in BPS in disease flare-ups. Long term application solely if all treatments failed.	C
Corticosteroids are not recommended as long-term treatment.	C
Hydroxyzine is recommended for use in BPS.	A
Consider cimetidine as valid oral option before invasive treatments.	B
Amitriptyline is recommended for use in BPS.	A
Oral PPS is recommended for use in BPS.	A
Treatment with oral PPS plus subcutaneous heparin is recommended especially in low responders to PPS alone.	A
Antibiotics can be offered when infection is present or highly suspected.	C
Prostaglandins are not recommended. Insufficient data on BPS, adverse effects considerable.	C

Cyclosporin A might be used in PPS but adverse effects are significant and should be carefully considered.	B
Duloxetine is not recommended for BPS treatment.	C
Oxybutynin might be considered for the treatment of BPS.	C
Gabapentin might be considered in oral treatment of BPS.	C
Consider intravesical lidocain plus sodium bicarbonate prior to more invasive methods.	A
Consider intravesical PPS before more invasive treatment alone or combined with oral PPS.	A
Consider intravesical heparin before more invasive measures alone or in combination treatment.	C
Consider intravesical hyaluronic acid before more invasive measures.	B
Consider intravesical chondroitin sulphate before more invasive measures.	B
Consider intravesical DMSO before more invasive measures.	A
Consider intravesical bladder wall and trigonal injection of BTX-A if intravesical instillation therapies failed.	C
Consider submucosal injection of BTX-A plus hydrodistension if intravesical instillation therapies failed.	A
Intravesical therapy with Bacillus Calmette Guérin is not recommended in BPS.	A
Intravesical therapy with cloropactin is not recommended in BPS.	A
Intravesical therapy with vanilloids is not recommended in BPS.	C

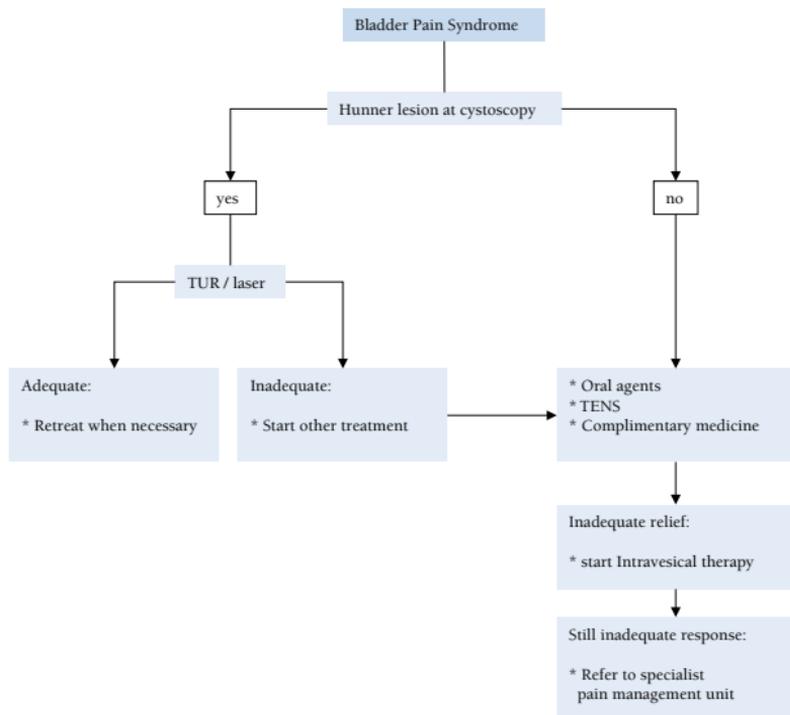
Bladder distension is not recommended as a treatment of BPS.	C
Electromotive drug administration might be considered before more invasive measures.	C
Consider transurethral resection (or coagulation or laser) of bladder lesions, but in BPS type 3 C only.	B
Neuromodulation might be considered before more invasive interventions.	B
Consider bladder training in patients with little pain.	B
Consider manual and physical therapy in first approach.	B
Consider in diet avoidance of triggering substances.	C
Accupuncture is not recommended.	C
Consider psychological therapy in multimodal approach.	B
All ablative organ surgery should be last resort for experienced and BPS knowledgeable surgeons only.	A

PPS = pentosanpolysulphate sodium; DMSO = dimethyl sulphoxide.

Figure 5: diagnosis and therapy of BPS

Assessment	Treatment	
Urine culture	Grade A recommended	Standard: Hydroxyzine, Amitriptyline, Pentosanpolysulphate
Uroflowmetry		Intravesical: PPS, DMSO, onabotulinum toxin A plus hydrodistension
Cystoscopy with hydrodistension	Grade B recommended	Oral: Cimetidine , cyclosporin A
Bladder biopsy		Intravesical: hyaluronic acid, chondroitin sulphate
Micturition diary		Electromotive drug administration for intravesical drugs
Pelvic floor muscle testing		Neuromodulation, bladder training, physical therapy
Phenotyping		Psychological therapy
ICSI score list	Not recommended	Bacillus Calmette Guerin
		Intravesical Chlorpactin
	Other comments	Data on surgical treatment are largely variable
		Coagulation and laser only for Hunner's lesions

Figure 6: algorithm for BPS Type 3 C



GENITAL PAIN SYNDROME

Recommendations: treatment of genital pain syndrome	GR
We recommend to start with general treatment options for chronic pelvic pain (see chapter 10).	A
We recommend informing about the risk of post-vasectomy pain when counselling patients planned for vasectomy.	A
To reduce the risk of scrotal pain, we recommend open instead of laparoscopic inguinal hernia repair.	A

We recommend that during inguinal hernia repair all the nerves in the spermatic cord are identified.	A
For patients who are treated surgically, we recommend microsurgical denervation of the spermatic cord.	A
For patients who do not benefit from denervation we recommend to perform epididymectomy.	B
We recommend that orchiectomy is reserved as last resort when every other treatment has failed.	C

Figure 7: assessment and treatment algorithm for scrotal pain syndrome

Assessment	Treatment	
Semen culture	Grade A recommended	General treatment options for chronic pelvic pain - <i>chapter 10</i>
Uroflowmetry		Microsurgical denervation of the spermatic cord
Ultrasound scrotum (see text)	Grade B recommended	Inform patients undergoing vasectomy about the risk of pain
Pelvic floor muscle testing		For surgeons: open hernia repair yields less scrotal pain
Phenotyping		For surgeons: identify all nerves during hernia repair
	Other comments	Epididymectomy, in case patient did not benefit from denervation
		Orchiectomy is a last resort option, when everything else has failed
		Ultrasound has no clinical implications on the further treatment although physicians tend to still use ultrasound to reassure the patient

URETHRAL PAIN SYNDROME

Recommendations: treatment of urethral pain syndrome	GR
We recommend to start with general treatment options for chronic pelvic pain (see chapter 10).	A
We recommend that patients with urethral pain syndrome are treated in a multidisciplinary and multi-modal programme.	B

When patients are distressed, we recommend referring them for pain-relevant psychological treatment to improve function and quality of life.	B
----------------------------------------------------------------------------------------------------------------------------------------------	---

Figure 8: assessment and treatment algorithm for urethral pain syndrome

Assessment	Treatment	
Uroflowmetry	Grade A recommended	General treatment options for chronic pelvic pain - <i>chapter 10</i>
Micturition diary		
Pelvic floor muscle testing	Grade B recommended	Treat in a multidisciplinary and multimodal programme Pain-relevant psychological treatment to improve QoL and function
Phenotyping		
	Other comments	Data on urethral pain are very sparse and of limited quality

GYNAECOLOGICAL ASPECTS OF CHRONIC PELVIC PAIN

Recommendations: gynaecological aspects of chronic pelvic pain	GR
All women with pelvic pain should have a full gynaecological history and evaluation, and including laparoscopy is recommended to rule out a treatable cause (e.g. endometriosis).	A
Provide therapeutic options such as hormonal therapy or surgery in well-defined disease states.	B
Provide a multidisciplinary approach to pain management in persistent disease states.	B
Recommend psychological treatment for refractory chronic vulvar pain.	B
Use alternative therapies in the treatment of chronic gynaecological pelvic pain.	C

Figure 9: assessment and treatment algorithm gynaecological aspects in chronic pelvic pain

Assessment	Treatment	
Gynaecological examination	Grade A recommended	Laparoscopy to rule out treatable causes
Ultrasound		
Laparoscopy (see text)	Grade B recommended	Hormonal therapy in well defined states Multidisciplinary approach in persistent disease states Psychological treatment for refractory chronic vulvar pain

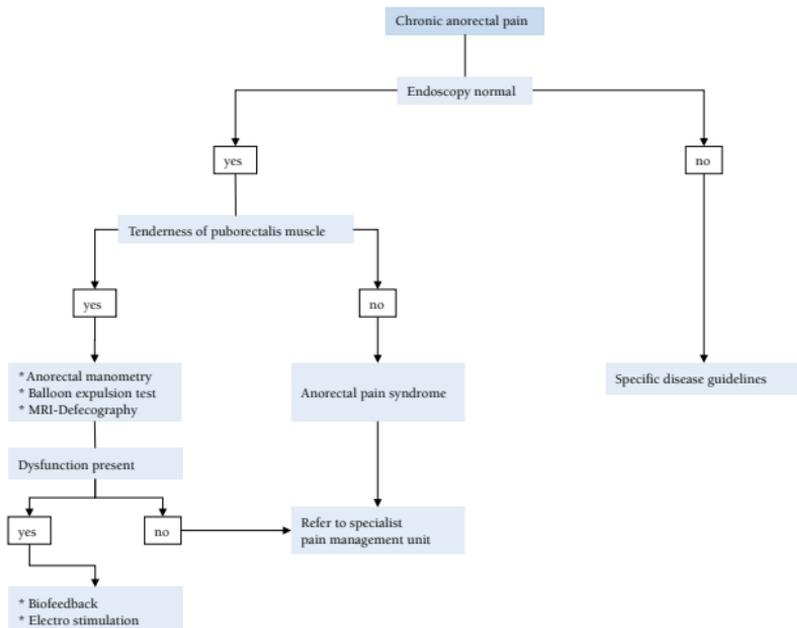
GASTROINTESTINAL ASPECTS OF CHRONIC PELVIC PAIN

Recommendations for functional anorectal pain	GR
Functional testing is recommended in patients with anorectal pain.	A
Biofeedback treatment is recommended in patients with pelvic pain and dyssynergic defecation.	A
Botulinum toxin and electrogalvanic stimulation can be considered in the chronic anal pain syndrome.	B
Sacral neuromodulation is recommended in the chronic anal pain syndrome.	C
Diltiazem is recommended in the intermittent chronic anal pain syndrome.	C

Figure 10: assessment and treatment algorithm for anorectal pain syndrome

Assessment	Treatment	
Endoscopy	Grade A recommended	Biofeedback treatment
Pelvic floor muscle testing		
Anorectal manometry	Grade B recommended	Botulinum toxin A in women with pelvic pain
Rectal balloon expulsion test		Electro-galvanic stimulation
MRI-defecography	Other comments	Sacral neuromodulation should be considered
		Diltiazem should be considered in intermittent anal pain syndrome

Figure 11: diagnosis algorithm for chronic anorectal pain



PERIPHERAL NERVE PAIN SYNDROMES

Recommendations: pudendal neuralgia	GR
It is important to rule out confusable diseases.	A
If a peripheral nerve pain syndrome is suspected, early referral should occur to an expert in the field, working within a multidisciplinary team environment.	B
Imaging and neurophysiology may help with the diagnosis, but the gold standard investigation is an image and nerve locator guided local anaesthetic injection.	B
Neuropathic pain guidelines are well established. Standard approaches to management of neuropathic pain should be utilised.	A

Figure 12: assessment and treatment algorithm for peripheral nerve pain syndrome

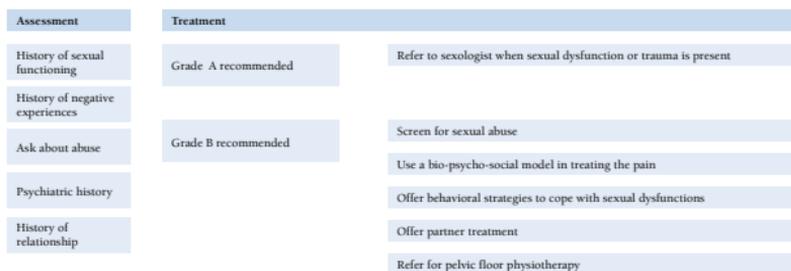
Assessment	Treatment	
Extended neurological tests	Grade A recommended	Refer to an expert when a peripheral nerve problem is suspected
Extended history on nature of pain	Grade B recommended	Imaging may be of help
Standardised questionnaires		Neurophysiology may be of help
		Treatment is as for any other nerve injury

SEXOLOGICAL ASPECTS OF CHRONIC PELVIC PAIN

Recommendations: sexological aspects of chronic pelvic pain	GR
Clinicians may screen for abuse in patients presenting with symptoms suggestive for prostate pain syndrome, but should not assume the pain is psychological.	B

The biopsychosocial model should be applied in the evaluation of the effect of prostate pain syndrome on the sexual function of the patient.	B
The biopsychosocial model should be incorporated in research in the role of chronic pelvic pain in sexual dysfunction.	B
Behavioral strategies should be offered to the patient and his/her partner to cope with sexual dysfunctions.	B
We recommend training of the pelvic floor muscles to improve quality of life and sexual function.	B

Figure 13: assessment and treatment algorithm for sexual aspects in chronic pelvic pain

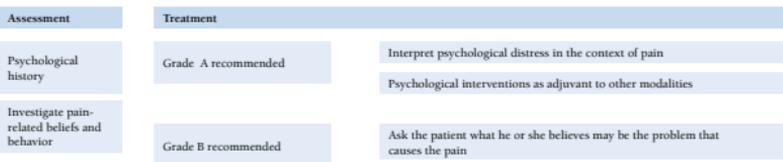


PSYCHOLOGICAL ASPECTS OF CHRONIC PELVIC PAIN

Recommendations: psychological aspects of chronic pelvic pain	GR
Psychological distress is common in pelvic pain in women but should be interpreted in the context of pain.	A
We recommend asking the patient what she thinks may be wrong to cause pain, to allow the opportunity to inform and reassure as appropriate.	B

We recommend trying psychological interventions in combination with medical and surgical treatment, or alone.	A
---------------------------------------------------------------------------------------------------------------	---

Figure 14: assessment and treatment algorithm for psychological aspects of chronic pelvic pain



PELVIC FLOOR FUNCTION AND CHRONIC PELVIC PAIN

Recommendations: pelvic floor function	GR
We recommend the use of the ICS classification on pelvic floor muscle function and dysfunction.	A
In patients with chronic pelvic pain syndrome we suggest to actively look for the presence of myofascial trigger points.	B
In patients with chronic pelvic pain syndrome we suggest to apply pelvic floor muscle treatment as first line treatment.	B
In patients with an overactive pelvic floor we recommend biofeedback as therapy adjuvant to muscle exercises.	A
When myofascial triggerpoints are found we recommend treatment by pressure or needling.	A

Figure 15: assessment and treatment pelvic floor function

Assessment	Treatment	
Palpation of the muscles	Grade A recommended	Use the International Continence Society classification of dysfunction
Testing of pelvic floor function		Use biofeedback in combination with muscle exercises
Pelvic floor muscle EMG		Treat myofascial triggerpoints using pressure or needling
Test for myofascial Triggerpoints	Grade B recommended	Look actively for the presence of myofascial trigger points
History of all the involved organs		Apply pelvic floor muscle therapy as first line treatment
Standardised questionnaires	Other comments	The role and options of a physiotherapist may differ between countries

GENERAL TREATMENT OF CHRONIC PELVIC PAIN

Recommendations: general treatment of chronic pelvic pain	GR
All other reasonable treatments must have been tried and failed.	
The decision to instigate long-term opioid therapy should be made by an appropriately trained specialist in consultation with another physician (including the patients and their family doctor).	A
Where there is a history or suspicion of drug abuse, a psychiatrist or psychologist with an interest in pain management and drug addiction should be involved.	A
The patient should undergo a trial of opioids.	A
The dose required needs to be calculated by careful titration.	A

<p>The patient should be made aware (and possibly give written consent):</p> <ul style="list-style-type: none"> • That opioids are strong drugs and associated with addiction and dependency. • Opioids will normally only be prescribed from one source (preferably the family doctor). • The drugs will be prescribed for fixed periods of time and a new prescription will not be available until the end of that period. • The patient may be subjected to spot urine and possibly blood checks to ensure that the drug is being taken as prescribed, and that non-prescribed drugs are not being taken. • Inappropriate aggressive behaviour associated with demanding the drug will not be accepted. • Hospital specialist review will normally occur at least once a year. • The patient may be requested to attend a psychiatric/psychological review. • Failure to comply with the above may result in the patient being referred to a drug dependency agency and the use of therapeutic, analgesic opioids being stopped. 	A
<p>Morphine is the first-line drug, unless there are contraindications to morphine or special indications for another drug.</p> <ul style="list-style-type: none"> • The drug should be prescribed in a slow-release/modified release form. • Short-acting preparations are undesirable and should be avoided where possible. • Parenteral dosing is undesirable and should be avoided where possible. 	<p>A</p> <p>A</p> <p>A</p>

Recommendations: medical treatment of chronic pelvic pain

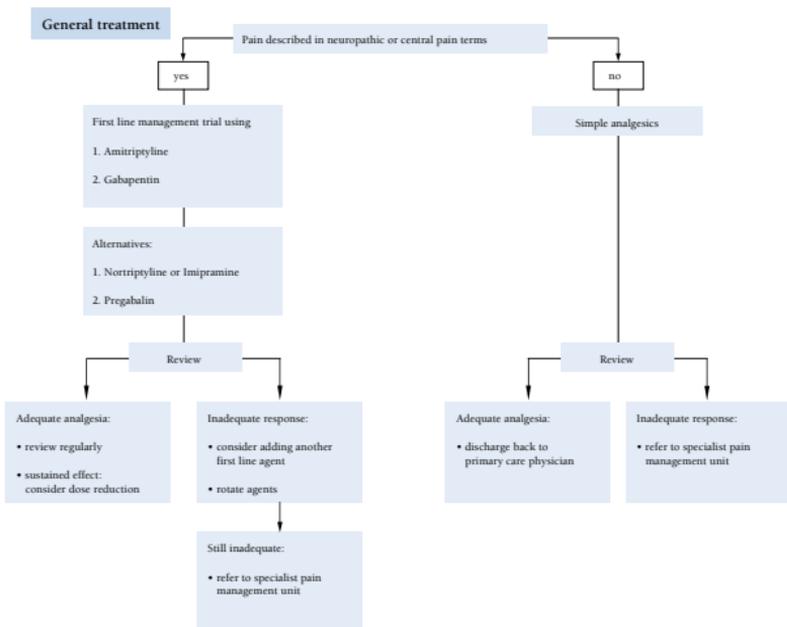
Agent	Pain Type	LE	Gr	Comment
Paracetamol	Somatic pain	1a	A	Evidence based on arthritic pain with good benefit
NSAIDs	Pelvic pain with inflammatory process (e.g. dysmenorrhoea)	1a	A	Good evidence for their use
	Central mechanisms (e.g. endometriosis)	1a	A	No good evidence for their use
Antidepressants including tricyclic antidepressants, venlafaxine and duloxetine	Neuropathic pain	1a	A	Effective. No specific evidence for chronic pelvic pain
Anticonvulsants gabapentin, pregabalin	Neuropathic pain, fibromyalgia	1a	A	Effective
Gabapentin	Women with chronic pelvic pain	2b	B	Effective

Topical capsaicin	Neuropathic pain	1a	A	Some evidence of benefit
Opioids	Chronic non-malignant pain	1a	A	Beneficial in a small number of patients
Nerve blocks		3	C	Have a role as part of a broad management plan
TENS		1a	A	No good evidence of benefit
Neuromodulation	Pelvic pain	3	C	Role developing with increasing research.

Figure 16: algorithm for the use of neuropathic analgesics

Assessment	Treatment	
General history	Grade A recommended	Paracetamol in somatic pain
Medications used		NSAID's when inflammation is present
Allergic reactions		Antidepressants (including TCA) in neuropathic pain
Use of alcohol		Anticonvulsants in neuropathic pain
Daily activities that will be effected		Topical Capsaicin in neuropathic pain
		Opioids in chronic non-malignant pain
	Grade B recommended	Gabapentin in women with CPP
	Other comments	Nerve blocks as part of a broad management plan [C]
		Neuromodulation may become an option, increasing research [C]

Figure 17: algorithm for general treatment



This short booklet text is based on the more comprehensive EAU guidelines (ISBN 978-90-79754-70-0), available to all members of the European Association of Urology at their website - <http://www.uroweb.org>.