

# GUIDELINES ON CHRONIC PELVIC PAIN

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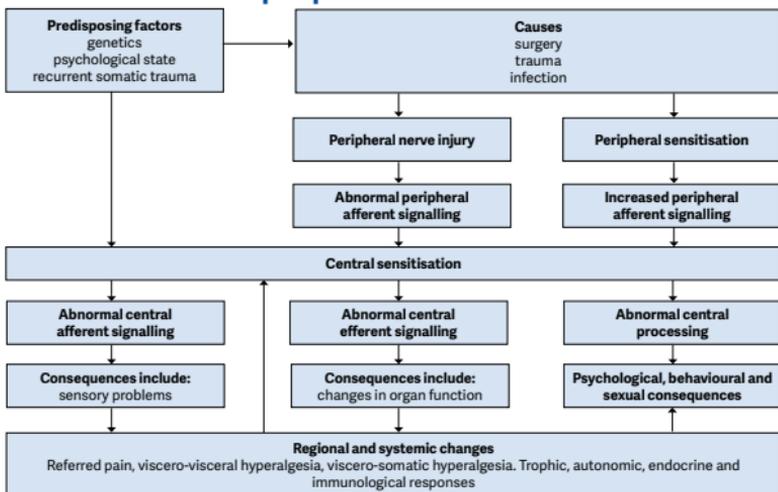
**Eur Urol 2010;57(1):35-48**

**Eur Urol 2013;64(3):431-9**

## Introduction

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 of the EAU Guidelines book ISBN 978-90-79754-80-9).

**Figure 1: Predisposing factors and causes associated with central and peripheral mechanisms**



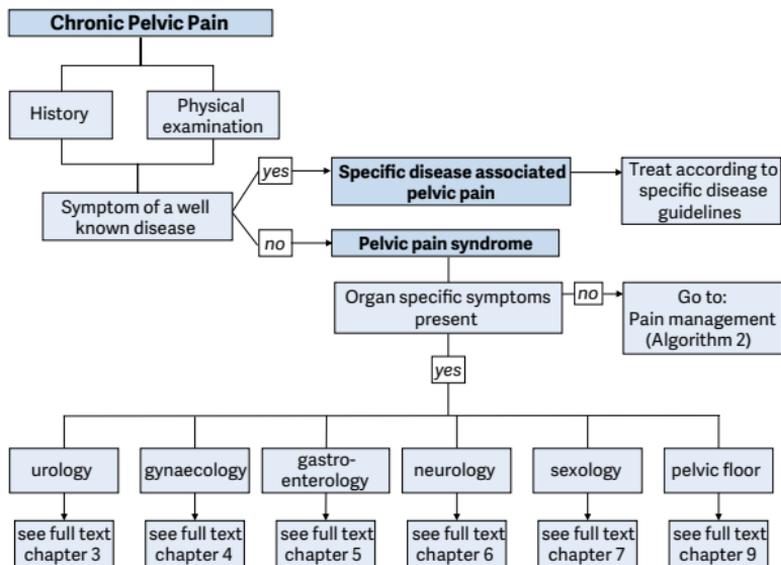
**Table 1: Classification of chronic pelvic pain syndromes**

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
			Postvasectomy
		Gynaecological	Vulvar Vestibular Clitoral
			Endometriosis associated
			CPPS with cyclical exacerbations
			Dysmenorrhoea
		Gastrointestinal	Irritable bowel
	Chronic anal		
	Intermittent chronic anal		
	Peripheral nerves	Pudendal pain syndrome	
	Sexological	Dyspareunia	
		Pelvic pain with sexual dysfunction	
	Psychological	Any pelvic organ	
	Musculo-skeletal	Pelvic floor muscle Abdominal muscle Spinal	
		Coccyx	

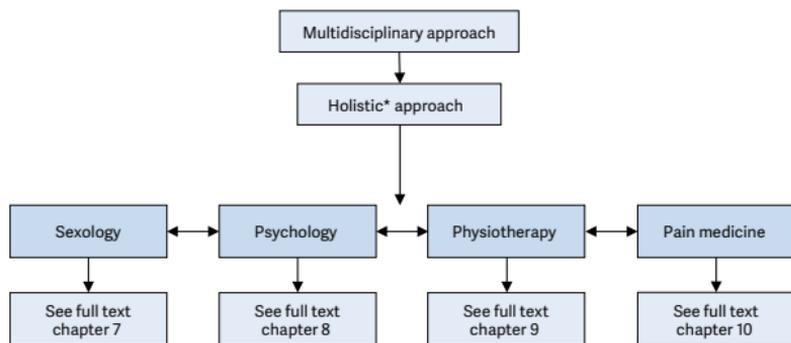
*Hx = History; Ex= Examination; Ix = Investigation; PTSD = post-traumatic stress disorder.*

<b>Axis IV Referral character- istics</b>	<b>Axis V Temporal characteristics</b>	<b>Axis VI Character</b>	<b>Axis VII Associated symptoms</b>	<b>Axis VIII Psychological symptoms</b>
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  SEXOLOGICAL 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

## Algorithm 1: Diagnosing and treating CPP



## Algorithm 2: Pain management



*\*The term 'holistic' means consideration of the complete person, physically, psychologically, socially, and spiritually, in the management and prevention of disease.*

**Figure 2: Phenotyping and assessment of 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, sexological 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 (PPS)

<b>Recommendations: assessment and diagnosis prostate pain syndrome (PPS)</b>	<b>GR</b>
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
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<b>Recommendations: treatment of prostate pain syndrome (PPS)</b>	<b>GR</b>
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
Electro-acupuncture 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

*TUNA = transurethral needle ablation; NSAIDs = non-steroidal anti-inflammatory drugs.*

**Figure 3: Assessment and treatment of 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	Grade B recommended	High dose Pentosan polysulfate to improve QoL and symptoms
NIH-CPSI scoring list		NSAIDs. Be aware of long-term side effects
Phenotyping		Phytotherapy
Pelvic floor muscle testing		Perineal extracorporeal shock wave therapy
		Electroacupuncture
		Percutaneous tibial nerve stimulation (PTNS)
	Psychological treatment focused on the pain	
	Not recommended	Allopurinol
		Pregabalin
		TransUrethral Needle Ablation (TUNA)

US = Ultrasound.

## BLADDER PAIN SYNDROME (BPS)

**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 <sup>a</sup>	Hunner's lesion <sup>b</sup>
Biopsy				
Not done	XX	1X	2X	3X
Normal	XA	1A	2A	3A
Inconclusive	XB	1B	2B	3B
Positive <sup>c</sup>	XC	1C	2C	3C

<sup>a</sup>Cystoscopy: glomerulations grade 2–3

<sup>b</sup>Lesion per Fall's definition with/without glomerulations

<sup>c</sup>Histology showing inflammatory infiltrates and/or detrusor mastocytosis and/or granulation tissue and/or intrafascicular fibrosis.

ESSIC = International Society for the Study of Bladder Pain Syndrome.

<b>Recommendations: assessment and diagnosis bladder pain syndrome (BPS)</b>	<b>GR</b>
Specific diseases with similar symptoms must 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

<b>Recommendations: treatment of bladder pain syndrome (BPS)</b>	<b>GR</b>
Offer subtype and phenotype-oriented therapy for the treatment of BPS.	A
Multimodal behavioural, physical and psychological techniques should always be considered alongside oral or invasive treatments of BPS.	A
Analgesics should be used preferably in collaboration with a pain clinic.	C
Corticosteroids are not recommended for long-term treatment.	C
Do not offer hydroxyzine for the treatment of BPS.	C

Consider cimetidine as a valid oral option before invasive treatments.	B
Administer amitriptyline for use in BPS.	A
Offer oral pentosanpolysulphate sodium for the treatment of BPS.	A
Treatment with oral pentosanpolysulphate sodium plus subcutaneous heparin is recommended especially in low responders to pentosanpolysulphate sodium alone.	A
Prostaglandins are not recommended. Insufficient data on BPS, adverse effects are considerable.	C
Cyclosporin A might be used in BPS 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 for oral treatment of BPS.	C
Administer intravesical lidocaine plus sodium bicarbonate prior to more invasive methods.	A
Administer intravesical pentosanpolysulphate sodium before more invasive treatment alone or combined with oral pentosanpolysulphate sodium.	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 bladder wall and trigonal injection of BTX-A if intravesical instillation therapies have failed.	C

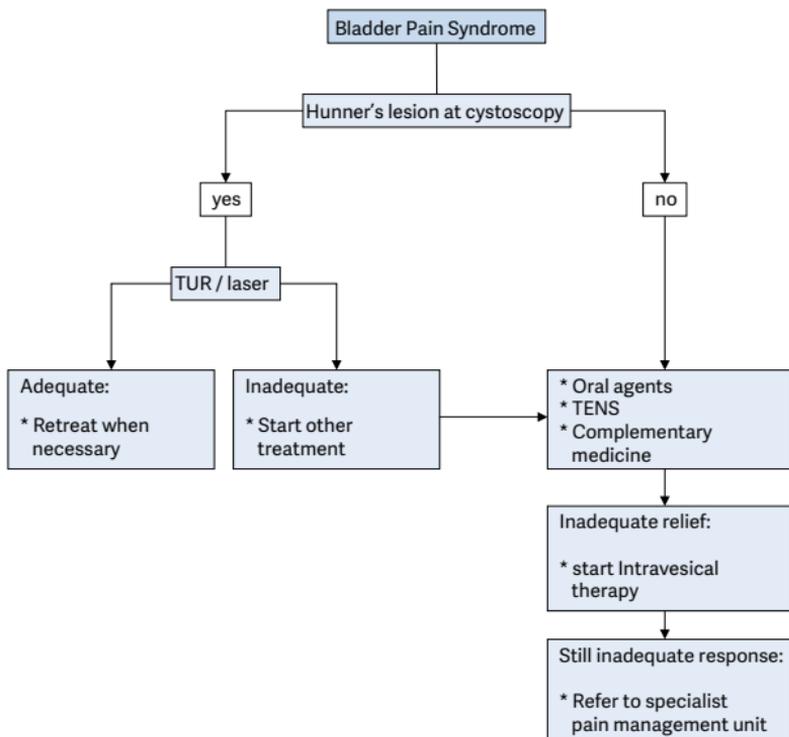
Administer submucosal injection of BTX-A plus hydro-distension if intravesical instillation therapies have failed.	A
Intravesical therapy with BCG is not recommended in BPS.	A
Intravesical therapy with clorpectin is not recommended in BPS.	A
Bladder distension is not recommended as a treatment of BPS.	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 diet avoidance of triggering substances.	C
Acupuncture is not recommended.	C
All ablative organ surgery should be the last resort for experienced and BPS knowledgeable surgeons only.	A

*BCG = Bacillus Calmette-Guerin; BPS = bladder pain syndrome; BTX-A = botulinum toxin A; DMSO = dimethyl sulphoxide.*

**Figure 4: Diagnosis and therapy of BPS**

Assessment	Treatment	
Urine culture	Grade A recommended	Standard: 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 Guérin
		Intravesical Chlorpactin
		Hydroxyzine
	Other comments	Data on surgical treatment are largely variable
		Coagulation and laser only for Hunner's lesions

### Algorithm 3: Treatment of BPS Type 3 C



### SCROTAL PAIN SYNDROME

Recommendations: treatment of scrotal pain syndrome	GR
Start with general treatment options for chronic pelvic pain.	A
Inform about the risk of postvasectomy pain when counselling patients planned for vasectomy.	A
To reduce the risk of scrotal pain, open instead of laparoscopic inguinal hernia repair is recommended.	A

It is recommended that during inguinal hernia repair all the nerves in the spermatic cord are identified.	A
For patients who are treated surgically, microsurgical denervation of the spermatic cord is recommended.	A
For patients who do not benefit from denervation it is recommended to perform epididymectomy.	B
We recommend that orchiectomy should not be done, unless all other therapies, including pain management assessment, have failed.	C

**Figure 5: Assessment and treatment of scrotal pain syndrome**

Assessment	Treatment	
Semen culture	Grade A recommended	General treatment options for chronic pelvic pain
Uroflowmetry		Microsurgical denervation of the spermatic cord
Ultrasound scrotum		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
		Grade B recommended
	Grade C recommended	In case all other therapies, including pain management assessment, have failed, orchiectomy is an option.
	Other comments	Ultrasound is only used to reassure the patient

## URETHRAL PAIN SYNDROME

<b>Recommendations: treatment of urethral pain syndrome</b>	<b>GR</b>
Start with general treatment options for chronic pelvic pain.	A
It is recommended that patients with urethral pain syndrome are treated in a multidisciplinary and multimodal programme.	B
When patients are distressed, it is recommended to refer them for pain-relevant psychological treatment to improve function and quality of life.	B

**Figure 6: Assessment and treatment of urethral pain syndrome**

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

## GYNAECOLOGICAL ASPECTS OF CHRONIC PELVIC PAIN

<b>Recommendations: gynaecological aspects in chronic pelvic pain</b>	<b>GR</b>
All women with pelvic pain should have a full gynaecological history and evaluation. 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 7: Assessment and treatment of gynaecological aspects in chronic pelvic pain**

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

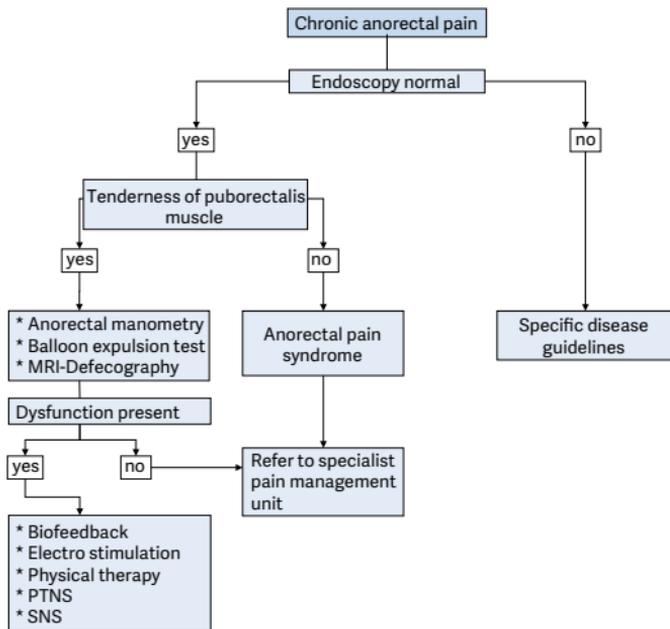
## GASTROINTESTINAL ASPECTS OF CHRONIC PELVIC PAIN

Recommendations: 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 A and electrogalvanic stimulation can be considered in the chronic anal pain syndrome.	B
Percutaneous tibial nerve stimulation can be considered in the chronic anal pain syndrome.	B
Sacral nerve stimulation should be considered in the chronic anal pain syndrome.	C
Inhaled salbutamol should be considered in the intermittent chronic anal pain syndrome.	C

**Figure 8: Assessment and treatment of 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 Electrogalvanic stimulation Percutaneous tibial nerve stimulation
Rectal balloon expulsion test	Other comments Sacral neuromodulation should be considered
MRI-defecography	Inhaled salbutamol should be considered in intermittent anal pain syndrome

## Algorithm 4: Diagnosis of chronic anorectal pain



PTNS = percutaneous tibial nerve stimulation; SNS = sacral nerve stimulation.

## 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 9: Assessment and treatment of 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 in chronic pelvic pain	GR
Patients presenting with symptoms suggestive for chronic pelvic pain syndrome should be screened for abuse, without suggesting a causal relation with the pain.	B
The biopsychosocial model should be applied in the evaluation of the effect of chronic pelvic 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
Offer behavioural strategies to the patient and his/her partner to cope with sexual dysfunctions.	B
Training of the pelvic floor muscles is recommended to improve quality of life and sexual function.	B

**Figure 10: Assessment and treatment of sexological aspects in chronic pelvic pain**

Assessment	Treatment	
History of sexual functioning	Grade A recommended	Refer to sexologist when sexual dysfunction or trauma is present
History of negative experiences		
Ask about abuse	Grade B recommended	Screen for sexual abuse
Psychiatric history		Use a bio-psycho-social model in treating the pain
History of relationship		Offer behavioural strategies to cope with sexual dysfunctions
		Offer partner treatment
		Refer for pelvic floor physiotherapy

## PSYCHOLOGICAL ASPECTS OF CHRONIC PELVIC PAIN

<b>Recommendations: psychological aspects of chronic pelvic pain</b>	<b>GR</b>
Psychological distress is common in pelvic pain in women, but should be interpreted in the context of pain.	A
Ask the patient what he/she thinks may be wrong to cause pain, to allow the opportunity to inform and reassure as appropriate.	B
Try psychological interventions in combination with medical and surgical treatment, or alone.	A

**Figure 11: Assessment and treatment of psychological aspects of chronic pelvic pain**

Assessment	Treatment	
Psychological history	Grade A recommended	Interpret psychological distress in the context of pain
Investigate pain-related beliefs and behaviour		Psychological interventions as adjuvant to other modalities
	Grade B recommended	Ask the patient what he or she believes may be the problem that causes the pain

## PELVIC FLOOR FUNCTION AND CHRONIC PELVIC PAIN

Recommendations: pelvic floor function	GR
The use of the ICS classification on pelvic floor muscle function and dysfunction is recommended.	A
In patients with chronic pelvic pain syndrome it is recommended to actively look for the presence of myofascial trigger points.	B
Apply pelvic floor muscle treatment as first-line treatment in patients with chronic pelvic pain syndrome.	A
In patients with an overactive pelvic floor biofeedback is recommended as therapy adjuvant to muscle exercises.	A
When myofascial trigger points are found treatment by pressure or needling is recommended.	A

**Figure 12: 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 trigger points using pressure or needling
	Apply pelvic floor muscle therapy as first-line treatment	
Test for myofascial trigger points	Grade B recommended	Look actively for the presence of myofascial trigger points
History of all the involved organs		
Standardised questionnaires	Other comments	The role and options of a physiotherapist may differ between countries

EMG = *electromyography*.

## GENERAL TREATMENT OF CHRONIC PELVIC PAIN

### Recommendations for use of opioids in chronic/non-acute urogenital pain

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).

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.

The patient should undergo a trial of opioids.

The dose required needs to be calculated by careful titration.

The patient should be made aware (and possibly give written consent):

- 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.

Morphine is the first-line opioid, unless there are contraindications to morphine or special indications for another drug.

- 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.

**Recommendations: medical and interventional treatment of chronic pelvic pain**

<b>Agent</b>	<b>Pain Type</b>	<b>LE</b>	<b>GR</b>	<b>Comment</b>
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.
Antidepressants including tricyclic antidepressants, duloxetine and venlafaxine	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.

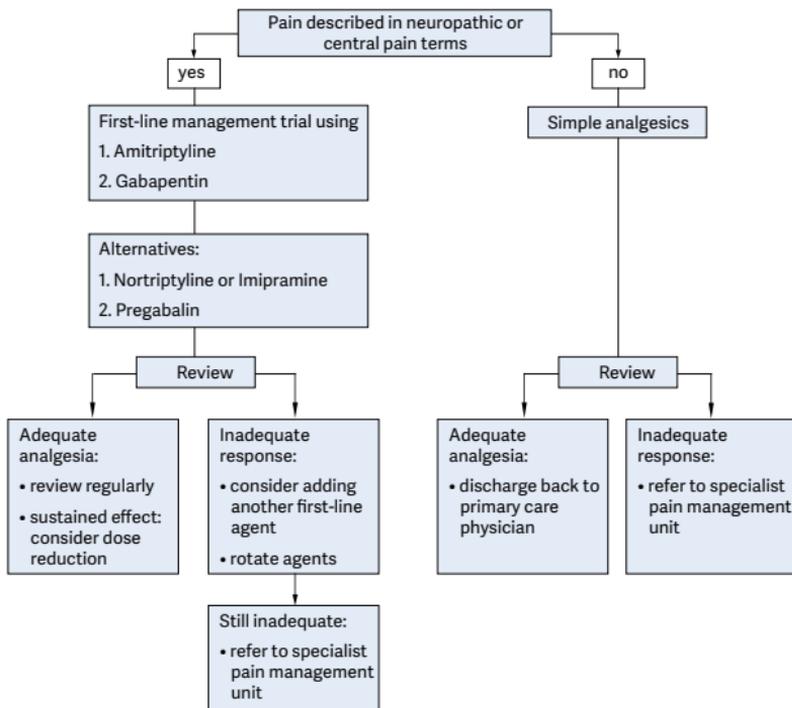
Nerve blocks		3	C	Have a role as part of a broad management plan.
TENS		1b	B	There is no good evidence for or against the use of TENS. Data covered chronic pain not just CPP and was insufficient regarding long-term treatment effects.
Neuromodulation	Pelvic pain	3	C	Role developing with increasing research.

NSAIDs = non-steroidal anti-inflammatory drugs;  
TENS = transcutaneous electrical nerve stimulation.

**Figure 13: General analgesic treatment of chronic pelvic pain**

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

## Algorithm 5: General management of CPP



*This short booklet text is based on the more comprehensive EAU Guidelines (ISBN 978-90-79754-80-9), available to all members of the European Association of Urology at their website, <http://www.uroweb.org>.*