Guidelines

The 2013 EAU Guidelines on Chronic Pelvic Pain: Is Management of Chronic Pelvic Pain a Habit, a Philosophy, or a Science? 10 Years of Development

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**Abstract**

**Context:** Progress in the science of pain has led pain specialists to move away from an organ-centred understanding of pain located in the pelvis to an understanding based on the mechanism of pain and integrating, as far as possible, psychological, social, and sexual dimensions of the problem. This change is reflected in all areas, from taxonomy through treatment. However, deciding what is adequate investigation to rule out treatable disease before moving to this way of engaging with the patient experiencing pain is a complex process, informed by pain expertise as much as by organ-based medical knowledge.

**Objective:** To summarise the evolving changes in the management of patients with chronic pelvic pain by referring to the 2012 version of the European Association of Urology (EAU) guidelines on chronic pelvic pain.

**Evidence acquisition:** The working panel highlights some of the most important aspects of the management of patients with chronic pelvic pain emerging in recent years in the context of the EAU guidelines on chronic pelvic pain. The guidelines were completely updated in 2012 based on a systematic review of the literature from online databases from 1995 to 2011. According to this review, levels of evidence and grades of recommendation were added to the text. A full version of the guidelines is available at the EAU office or Web site (www.uroweb.org).

**Evidence synthesis:** The previously mentioned issues are explored in this paper, which refers throughout to dilemmas for the physician and treatment team as well as to the need to inform and engage the patient in a collaborative empirical approach to pain relief and rehabilitation. These issues are exemplified in two case histories.

**Conclusions:** Chronic pelvic pain persisting after appropriate treatment requires a different approach focussing on pain. This approach integrates the medical, psychosocial, and sexual elements of care to engage the patient in a collaborative journey towards self-management.

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1. Introduction

1.1. Note from Magnus Fall, former chairman, EAU Guidelines Group on Chronic Pelvic Pain

The study and treatment of visceral pain syndromes have many facets. As emphasised by this group of experts working on various aspects of chronic pelvic pain within the European Association of Urology (EAU) guidelines project, the problem is complex, multifactorial, and multidimensional.

Philosophically, there are conflicting standpoints. Chronic pain has to be regarded as a disease in its own right and requires attention accordingly. This includes multidisciplinary care, which differs from the organ-centred view; general awareness of the importance of this approach is relatively recent. In contrast, the ultimate goal of therapy is treatment of a cause and its cure, if possible, or at least exclusion of serious diseases. Reaching this goal requires adequate clinical investigation, including relevant phenotyping of conditions with symptoms related to the prostate, bladder, urethra, and genital organs. An everyday dilemma in consultation with the patient with chronic pelvic pain is the fact that too much or too little attention to the clinical workup may ruin the outcome.

This article demonstrates the complexity of this area and discusses the approach to be taken. In the clinical situation, apart from awareness of good evidence-based treatment, experience and diversified knowledge are needed. This area is evolving and extremely important, since chronic pain is one of the most common reasons for disability.

1.2. Definition and classification

The name given to a condition can have major implications; however, arriving at a diagnosis is not an easy process in view of the many dimensions that need to be considered [1,2]. The EAU Chronic Pelvic Pain Guidelines Group has led much of this work when considering pain perceived in the pelvis [3–5]. Many groups have tried to tackle the issue from different viewpoints [6–12]. When the diagnostic terminology is inappropriate, harm can result for a number of reasons [13].

Pain associated with a well-described disease process requires that the disease be treated as the priority [3]. Pain management is also important and may reduce chronicity [14,15]. When there is pain in the absence of an obvious ongoing disease process, we are dealing with a pain syndrome [1,3]. In that case, it is essential to address the following, as appropriate: predisposing factors and causes [16–18], the chronic pain mechanisms for ongoing pain [3,19], the associated visceral dysfunctions [20,21], the associated musculoskeletal dysfunctions [22–24], the emotional consequences [25–27], the behavioural consequences [25], the sexual consequences [26,28], and the social consequences [29]. Identifying these characteristics as a part of the phenotype is an important element of the classification if we wish to ensure appropriate management [3,11,18,21,30,31–34].

2. Evidence for what we do and the risks of integrating or not integrating care

Management of chronic pelvic pain syndrome (CPPS) is challenging. Understanding the aetiopathogenesis of the condition remains inadequate, and current treatment strategies are frequently ineffective. Researchers and clinicians in the field generally agree that patients with CPPS are not a homogeneous group presenting with pain arising in pelvic organs but rather are individuals with widely different clinical phenotypes. It is likely that different mechanisms and dynamics are the basis for the highly individual courses of these conditions.

In 2004, the EAU guidelines on chronic pelvic pain expert panel proposed the multidimensional approach and continues to develop this concept. The US National Institutes of Health (NIH)/National Institute of Diabetes and Digestive and Kidney Diseases initiated the Multidisciplinary Approach to Pelvic Pain (MAPP) research consortium programme, which was launched and funded to explore the basic science (particularly biomarkers), aetiology, and epidemiology to understand this heterogeneous group of patients better. Another objective of MAPP is to achieve phenotyping of CPPS patients that could lead to individualised treatment strategies. The entire urology community has great hopes for this venture, though it may be several years before clinically relevant results are reached that can be translated into treatment plans for individual patients.

In an attempt to gain evidence to support this approach, Shoskes et al [33] were the first to propose a clinical phenotype-based classification system with six domains: urinary, psychosocial, organ specific, infection, neurologic/systemic, and tenderness (UPOINT). UPOINT aims to improve the understanding and management of prostate and bladder pain syndromes [35]. The clinical applicability of UPOINT to prostate pain syndrome (PPS) and bladder pain syndrome (BPS) has been demonstrated [32,33]. The value of UPOINT is that it will induce reflection on the multidimensional complexity of this group of conditions.

In PPS, 22% of patients were characterised using only one phenotype domain, whereas in BPS, 13% of patients were characterised as having only two domains (by definition, patients would have had the urinary and organ-specific domain phenotype to be diagnosed with BPS). There was a positive association between the number of phenotypes and duration of disease, as well as symptom severity. It is interesting to note that in both CPPS conditions, the phenotypic domains outside the specific organ (bladder or prostate), which included psychosocial, neurologic/systemic, and tenderness, had the most impact on general symptoms and quality of life. An independent study produced results consistent with these [31].

These studies [31–33,35] suggest that different clinical phenotypes can be distinguished by the physician in clinical practice, and Shoskes et al suggest that UPOINT phenotyping may improve treatment outcome [11]. The UPOINT classification is expected to be adapted and modified as soon as additional validated information becomes available.
Following the snowflake representation (Fig. 1), further subcategorisation of UPOINT domains is intended, which may even alter the domain descriptions altogether, if necessary [36]. Building on the concept of multidimensional assessment and management, Nickel and Shoskes [36] have listed therapeutic options by domain (Table 1).

Although still early in its development, UPOINT appears to support the impression that multimodal treatment of CPPS patients with an individual combination of interventions is more successful than empirical sequential monotherapy.

2.1. Integrative model of pain management

There is growing pressure for an integrated team approach to assessing and managing this patient group. The clinicians and health care providers (in specialties such as urology, gynaecology, pain medicine, physiotherapy, psychology, and nursing) should have the appropriate training, expertise, time, facilities, and ongoing professional development to undertake the work. There should be close working relationships (e.g., multidisciplinary team meetings and joint clinics), and the task each individual undertakes should be determined more by personal attitudes and abilities than by original training backgrounds. This approach is most likely to occur in specialised centres.

3. Specifying risk and harm

The clinician is faced with a dilemma. Comprehensive investigation, which satisfies physician and patient that nothing treatable has gone undetected, risks strengthening the patient’s beliefs in biomedical solutions as the only route and may make it harder to create a transition to management strategies when nothing is found. However, engaging a chronic pain model at an early stage, without carrying out all investigations, runs the risk of failure to detect a treatable cause of pain and possibly a serious disease. This approach may leave important anxieties unaddressed in the patient and possibly in the physician. Patients differ substantially in the extent to which they are open to discussion about the emotional and behavioural aspects of pain at any stage of consultation or treatment. The tendency towards catastrophic thinking is common: Attention focusses on threatening information, threat is overestimated, and the patient becomes stuck in ruminative worry [37,38]. This outcome is not surprising when the body is so often represented as a largely repairable machine, yet the pain defies the attempt to “repair” putative causes or no causes are found.

Introducing an integrated model of pain early in consultations makes negotiations regarding investigations and treatment attempts easier. Whatever the cause, the patient and physician can share an understanding of pain in which the psychological contribution to pain is not misrepresented as exaggeration or neurosis but rather is seen as amplifying or inhibiting pain messages and generating adaptive or maladaptive behaviours. These behaviours, in turn, will vary with context; thus, while there are general principles for living with pain, their use in day-to-day activity can be very demanding of a patient’s resources.

Table 1 – Therapeutic options by UPOINT domain

<table>
<thead>
<tr>
<th>UPOINT description</th>
<th>Suggested therapies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Urinary</strong></td>
<td></td>
</tr>
<tr>
<td>NIH CPSI urinary score &gt;4</td>
<td>Antimuscarinics</td>
</tr>
<tr>
<td>Obstructive voiding symptoms</td>
<td>α-Blockers</td>
</tr>
<tr>
<td>Bothersome urgency, frequency, and/or nocturia</td>
<td></td>
</tr>
<tr>
<td>Elevated postvoid residual</td>
<td></td>
</tr>
<tr>
<td><strong>Psychosocial</strong></td>
<td></td>
</tr>
<tr>
<td>Clinical depression</td>
<td>Counselling</td>
</tr>
<tr>
<td>Evidence of maladaptive coping</td>
<td>Cognitive behavioural therapy</td>
</tr>
<tr>
<td>Anxiety/stress</td>
<td>Antidepressants</td>
</tr>
<tr>
<td></td>
<td>Antianxiolytics</td>
</tr>
<tr>
<td><strong>Organ specific</strong></td>
<td></td>
</tr>
<tr>
<td>Specific prostate tenderness</td>
<td>α-Blockers</td>
</tr>
<tr>
<td>Leukocytosis in prostatic fluid</td>
<td>5-α-Reductase inhibitors</td>
</tr>
<tr>
<td>Haematospermia</td>
<td>Phytotherapy</td>
</tr>
<tr>
<td>Extensive prostatic calcification</td>
<td>Prostate massage</td>
</tr>
<tr>
<td><strong>Infection</strong></td>
<td></td>
</tr>
<tr>
<td>Gram-negative bacilli or enterococci localized to prostatic fluid</td>
<td>Antimicrobials</td>
</tr>
<tr>
<td>Documented successful response to antimicrobial therapy</td>
<td></td>
</tr>
<tr>
<td><strong>Neurologic/systemic conditions</strong></td>
<td></td>
</tr>
<tr>
<td>Clinical evidence of central neuropathy</td>
<td>Neuromodulators</td>
</tr>
<tr>
<td>Pain beyond pelvis</td>
<td>Specific therapies for associated conditions</td>
</tr>
<tr>
<td>Irritable bowel syndrome</td>
<td></td>
</tr>
<tr>
<td>Fibromyalgia</td>
<td></td>
</tr>
<tr>
<td>Chronic fatigue syndrome</td>
<td></td>
</tr>
<tr>
<td><strong>Tenderness of skeletal muscles</strong></td>
<td>Focused pelvic physiotherapy</td>
</tr>
<tr>
<td>Palpable tenderness and/or painful muscle spasm or trigger points in abdomen and/or pelvic floor</td>
<td>General physiotherapy</td>
</tr>
<tr>
<td></td>
<td>Exercises</td>
</tr>
</tbody>
</table>

NIH CPSI = National Institutes of Health Chronic Prostatitis Symptom Index; UPOINT = Urinary, Psychosocial, Organ specific, Infection, Neurologic/systemic, and Tenderness.

* Exclude patients with clinical category 1 or 2 prostatitis.

Adapted from Nickel and Shoskes [36].
There are no good published models of this practice yet, although there is evidence that effective education can mobilise patients to start to rehabilitate [39]. Information available on the Internet currently fails to provide a biopsychosocial model of chronic pain [40], and establishing such a model requires the clinician to clearly elicit the patient’s current beliefs and then build on those beliefs and on the patient’s experience to explain the functional changes in the pain system that constitute chronic pain. Encouraging the patient to notice how changes in pain can precede and follow changes in mood or particular behaviours can, but is not guaranteed to, provide useful examples of an integrated pain system.

3.1. Appropriate assessment

Pelvic pain should be evaluated through comprehensive history taking and physical examination that includes a pelvic examination (including internal examination), along with a thorough neurologic, myofascial, and postural assessment. This assessment should direct the physician towards either a treatable condition or putative identification of an end organ in which the pain is perceived, although not necessarily the basis for the pain. The pursuit of specific diagnostic tests is appropriate, as outlined in the EAU guidelines [3]. Diagnosing a patient early on, without appropriate investigations, is unacceptable. Physician and patient should mutually agree on any diagnostic investigations after discussing potential risks and benefits. Tests should first include the least aggressive, progressing or not progressing to more invasive or demanding tests. Through this course of action, confusable diseases with definitive treatment will seldom be missed [41]. Once a main organ is implicated, the respective specialist should be consulted. Ruling out infections, cancer, obstruction, trauma sequelae, and myofascial dysfunction must be part of a basic workup for clinicians in all specialties dealing with pelvic pain.

Patients need not only the comfort of finally having a diagnosis but also the certainty of not having any other diagnosis missed. This reasoning must be balanced against the personal and economic costs of exhaustive diagnostic measures. Repeated investigations should be considered only with a significant change in clinical presentation [3].

4. Agreeing on a management plan with the patient and managing expectations

When a management plan is based on a shared model of pain, there is always reason to address recovery of activity and function no matter what other treatment is initiated, since pain relief does not reliably bring recovery of function. Although the patient and clinician often posit pain as the only barrier to recovering the patient’s previous lifestyle, anxieties regarding the possibility of undetected disease (eg, cancer) or risk of damage (eg, when pain in the vulva or penis is contingent on activity) may be a greater obstacle. When analgesic treatment is effective, such concerns may be exacerbated by the fear of not receiving “warning signs” of pain, and so, from the patient’s viewpoint, the safe behaviour is to avoid activities that are or have been associated with increased pain.

Ideally, treatment attempts are discussed in the context of what pain relief may be expected at maximum and at minimum, using good practice on communication of risk [42] and decision aids, where available [43]. However, pain relief is not the only goal; improvement in quality of life is also important. Each patient will have different priorities, but sleep, mood, everyday activity, work, and social and leisure activities are common ones [44]. Sexual activity is frequently a problem for patients with pelvic pain, although it is not always spontaneously mentioned by the patient. Several priorities should be targeted rather than targeting just one with the belief that improvement will solve all other problems. This approach requires patients to consider the rate of progress and what changes will be required to improve their quality of life.

Not only the patients but also those around them will have adapted to the patients’ disabilities and current lifestyle, and some opportunities, such as employment or sexual partners, may have been lost because of pain. Planning behaviour changes with gradual increases, as well as anticipating and planning for setbacks and obstacles, is often best done with the help of physiotherapists, psychologists, sex therapists, or other clinical colleagues. These tasks may involve a partner or whoever offers social support to the patient.

Decision-making tools, such as the algorithms at the end of each chapter of the EAU chronic pelvic pain guidelines, define possible patient pathways [3]. These tools help the physician to follow an evidence-based pathway through the various options and may help with communicating options and decisions to patients. The more patients feel that the enterprise is collaborative, the more likely they are to adhere to management and to do so with realistic expectations. The British Pain Society Map of Medicine guidelines in the United Kingdom include a patient pathway from generalist into specialist care [45].

It is not possible to provide an up-to-date list of resources available to patients and the public, but it is useful for professional organisations to provide recommendations to clinicians, as has been done in the British Pain Society Map of Medicine guidelines [45]. Many of the available resources are very selective in the information conveyed and may have a commercial agenda [40]. It may be appropriate for professional organisations concerned with pelvic pain to combine forces with patients to provide written information available on the Internet or printed. Doing so would ensure that information provided to patients and those who care for them is evidence based, accurate, balanced, and anxiety reducing, particularly in relation to the meaning of pain.

5. Exemplary cases

The following cases exemplify the salient points previously raised that need to be considered in a patient presenting with pelvic/urogenital pain: Assessment and treatment should be seen as multidimensional, and approved standard
terminology should be used. Assessment should be appropriate, avoiding under-investigation and over-investigation. The management plan should be explained to, and agreed to by, the patient. The treatment should integrate different dimensions of care (eg, physiotherapy and psychology alongside medical intervention). Finally, review should be planned from the outset.

5.1. Case example: prostate pain

A 38-yr-old male patient was referred for refractory prostate pain. Symptoms had started approximately 10 months earlier, with an acute infection of the prostate with urinary symptoms including painful micturition, urinary frequency, and urgency. Elevated leukocytes (100 leukocytes per microlitre) in midstream urine were found, with no bacteria, chlamydiae, mycoplasma, or Neisseria gonorrhoea. After a short course of quinolone antibiotics, the micturition symptoms reappeared, including hesitancy and straining as well as diffuse pain in the pelvic area. Subsequently, two or three alternative antibiotics were administered for some time without improvement, and infection was never confirmed by urine analysis and urine culture or a pre- and postmassage test. The patient was afraid he had cancer because his father had died of prostate cancer some years ago; he was thinking of his pain all day long, and this had a major impact on his daily activities.

The pain was also negatively influencing the patient’s relationship with his wife. Because of painful ejaculation, his sexual activity was reduced. He also reported that passing hard stools aggravated the pain. Pain was mainly perceived in the suprapubic area, the left scrotum, and the penile tip as well as the perineum and rectum. Long periods of walking could alleviate the symptoms, whereas sitting for a longer time, especially on a motorbike in cold weather, worsened the pain. The NIH Chronic Prostatitis Symptom Index total score was 31, with a mean visual analogue scale (VAS) for pain of 7 out of 10.

Examination of the patient showed pain on palpation of the left epididymis. Rectal examination revealed a hyperactive, nonrelaxing pelvic floor and pain on palpation of a soft prostate. A trigger point (tender area that reproduced many of the pain symptoms) was found in the pubourethralis muscle. No sensory or motor deficits were found on neurologic examination. Uroflowmetry showed a reduced maximal flow rate, but no residual urine was found. Flexible cystoscopy findings were normal except for painful passage through the hyperactive external urinary sphincter. Previous pelvic magnetic resonance imaging had not revealed any abnormalities.

The nature of the pain syndrome, including the lack of evidence for cancer, was explained to the patient and his wife. Advice was given regarding avoidance of pain-promoting factors such as sitting on cold and hard surfaces. In addition, the patient was encouraged to carry out physical activity as a pain-reducing behaviour. The patient used a local warming pad on a regular base. Oral therapy included an α-blocker for the lower urinary tract symptoms and a nonsteroidal anti-inflammatory drug to treat phases of worsening pain.

The patient was referred to a physiotherapist, who treated him with pelvic floor muscle exercises, biofeedback, and electrostimulation. After 5 mo, the patient reported a fluctuating improvement in pain to a mean VAS of 2–3. Lower urinary tract symptoms were also slightly improved. With careful explanation, psychological and physical support promoting self-management he could live with the pain and accept his situation much better than before.

5.2. Case example: sexual dysfunction and pain

A young woman, aged 29 yr, presented with complaints of pain after voiding. She had the worst pain when she was voiding after sexual intercourse. She was seen at a pelvic care centre by a gynaecologist and a urologist. The history showed a temporal relationship between the different complaints, with the patient first complaining of voiding problems, bad stream, residual urine, overactive bladder signs, and bladder pain. She then complained of pain during intercourse, located at the front side of the vagina. The pain was present in every position, which led to discontinuation of intercourse. Blood loss was sometimes present after intercourse. The patient had been in a relationship for 2.5 yr with a healthy man. She denied having had negative sexual experiences in the past. She was able to obtain sexual arousal, had sufficient vaginal lubrication, and achieved orgasm. Vaginal discharge was felt to be excessive and had a bad smell. No vulval or vaginal itching was reported. She had a regular menstrual cycle.

The sexual history taken from the couple showed that communication between the two was limited. The patient did not feel that her partner understood her. He was not able to achieve an orgasm during intercourse with her, and this led to prolonged vaginal intercourse. She accepted the pain to reach her goal, which was to allow her partner to achieve an orgasm inside her vagina. However, this goal was not achieved. There was a wish for a child, but this was a problem because the partner was unable to ejaculate during intercourse.

Gynaecologic examination revealed no vulval pathology, but the introduction of a speculum was painful. Endovaginal ultrasound did not show any abnormalities. Culture of the discharge showed no yeast, no bacteria, and no chlamydiae. Colposcopy and biopsies showed unspecific inflammation of the cervix. The pelvic floor muscle function was classified as overactive (International Continence Society classification). Palpation of the muscles was painful, and trigger points were detected.

The couple were advised to avoid intercourse and use a fatty neutral cream, and they were referred to a physiotherapist for pelvic floor muscle relaxation and coordination. After 6 mo, the patient reported an improvement in her voiding problems. Intercourse was still painful and was avoided. After receiving an explanation of the relationship between the voiding problems, pelvic floor dysfunction, and dyspareunia, they were advised to see a sexologist. Pelvic floor physiotherapy was continued. After a further 6 mo, they were able to have painless intercourse. The patient learned to accept that her partner did not achieve an orgasm during coitus. Communication between
the couple improved, and contraception was stopped with the hope of a pregnancy.

6. **Controversies**

6.1. **Realism versus aspiration**

Physicians have been trained to cure patients. Over the years, the number of investigational options has increased. Physicians can use these options to attempt to make an adequate diagnosis. Patients with chronic pelvic pain are desperate for a cure, and physicians in turn feel obliged to establish a diagnosis and rule out life-threatening conditions such as cancer. Diagnostic investigations often seem appropriate, and when the first attempt is unsuccessful, another, more highly technical set of instruments is applied. Today it is possible to investigate almost all parts of the body. Each time a patient is referred for a new test, it will raise expectations of finding a cause of the pain. The aspiration of the physician is contrary to the reality, as we hardly ever find a classic aetiology for chronic pain. By holding on to their aspirations, clinicians fail to accept pain as a diagnosis in its own right. By being realistic, however, physicians can explain to their patients the nature and mechanism of chronic pain and make an early start on pain management.

6.2. **Delivery of care: community or specialised services?**

Patients want high-quality care delivered close to home and with minimal disruption to their daily lives. In many cases, this care is provided by primary care physicians, who by their nature have a very broad but not deep medical knowledge base. Undergraduate training in pain management is poor across all health care providers [46] despite internationally published curricula [47]. Chronic pelvic pain has multiple facets, often requiring several interventions running concurrently [45]. This scenario frequently involves multidisciplinary teams (with specific expertise in the management of pelvic pain) working with the patient. Delivery has therefore traditionally been in the secondary care setting.

This situation could be changed if those involved with designing health care professional educational programmes took pain management training seriously. A deeper level of understanding would allow the commonly used interventions to be effectively delivered at the primary care level. Multidisciplinary assessment and management by specialists would continue to be required for the complex cases [3,45] and would require the facilities, expertise, and training to deliver such care. This specialist expertise could then be used to provide education and support to primary care clinicians as well as to initiate assessment and management for complex patients; the aim would be to ensure that patient management would be provided as close to home as possible through shared care. The skills of the specialist could be used more effectively in complex cases but would also provide support to a wider group of clinicians who would directly manage the cases within their competencies.

6.3. **Crisis management and recurrent admission into hospital**

The mechanisms of central sensitisation are well defined for many chronic pain conditions [48–54], so it is not unreasonable to assume that the resultant hyperalgesia causes an increased pain experience. It is well established that psychological factors in response to pain can exacerbate the pain experience and be associated with what may appear to be disproportionate distress and, as a result, a worse prognosis [26,27,55]. With chronic persistent pain, there is often a spread to other visceral and somatic tissues [50,56,57]. Therefore, it should not be a surprise that a single-option approach to managing these patients will not work and that these patients often defeat clinicians who do not work within multispeciality and interdisciplinary teams [18]. These patients are often admitted and readmitted into hospital as a result.

The following actions are key in managing these patients in hospital:

- Identify patients with potentially problematic pain early on by their high levels of pain and distress. Having received multiple previous medical opinions may exacerbate confusion and distress.
- Enlist the early involvement of pain expertise to support these patients and their caregivers as a part of a multispeciality, interdisciplinary, shared-care approach.
- Listen to the patient’s concerns and provide a clear management plan with which the patient agrees.
- Use appropriate physical and medical interventions from evidence-based guidelines [3,14] as part of an agreed long-term management plan that also involves attention to psychological needs and aims towards self-management.
- As part of this plan, agree on a discharge plan early on with involvement of the patient, individuals involved in the patient’s medical and social care, the local pain management centre, and/or community or primary care teams.
- In the discharge plan, include rapid access to the expertise required and to dedicated services, if needed. Such services should include input from pain physicians (on interventions, drug management, diagnostic and other medical support), pain management psychologists, physiotherapists, specialist nurses, and others, as appropriate.
- Maintain good communication throughout.

6.4. **Opioids in pain management**

Opioids have a role in the management of chronic noncancer pain but are not the panacea often hoped for. It is clear that they come with the potential for unwanted side-effects that may be more detrimental to the patient than any benefits provided. These side-effects include influences on immunosuppression, hormonal deficiency, and the phenomenon of hyperalgesia [58–61].

Although the possibility of these side-effects should not stop opioid use, it should make clinicians think. Pain management requires an integrated approach that includes patient involvement and understanding. There is clear
guidance on the use of opioids [62–64] as part of an integrated package of care involving the patient, primary care physician, and pain management specialists. Opioids should not be first-line management and will often follow trial of neuromodulating drugs (in which the dose has been optimised) and nonpharmacologic strategies. There should be regular review to assess the effects and recorded outcomes on function and quality of life. Doses should be adjusted accordingly. Reducing opioids or stopping them may be beneficial through reducing side-effects (often subtle) and improving quality of life, even if there is no alternative agent. This reduction or cessation requires time and support for the patient.

6.5. Long-term follow-up of patients

Long-term follow-up should be a continuation of the agreed care plan that is reviewed on a regular basis and in accordance with published evidence-based guidelines for the management and support of patients with chronic pain [3,45]. Patients with more complex conditions may require dedicated centres resembling those defined by the National Health Service Commissioning Board for the United Kingdom (http://www.commissioningboard.nhs.uk).

The following are the salient features of long-term follow-up:

- Interdisciplinary and multispecialty pain assessment, management, and rehabilitation by appropriately trained pain specialists
- Provision of specialised support that cannot be provided in the community and of secondary care to patients with complex needs
- Dedicated specialised pain management centres with appropriate support staff
- Complex pain interventions to be provided (medical and cognitive behavioural).

7. Conclusions

The management of patients with chronic pelvic pain is challenging. Because of the multifactorial causes and multidimensional consequences of this pain, health care providers should be aware of well-described mechanisms outside the usual organ limits. The EAU guidelines on chronic pelvic pain propose that treatment strategies are most successful if they are undertaken in the broader scope of an integrated care model by a team with the necessary knowledge and skills to treat pain patients [3].

Early in the diagnostic process, patient and treatment team should work towards shared views on the mechanisms of chronic pain. It is important to exclude well-defined diseases with treatable causes. Once these diseases are ruled out, the patient should be diagnosed as having a pain syndrome, which avoids repeated, unnecessary, cost-intensive, and potentially harmful investigations or treatments. Treatment then should focus on recovery of normal activity and function within a shared plan actively involving the patient. Long-term follow-up of complex patients requires specialised centres working within a shared-care framework. Future research will show if phenotype-based treatment will improve patient outcome. Because sequential monotherapeutic strategies have mostly failed, it will be important to investigate multimodal treatments in the years to come.

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Study concept and design: Engeler, Baranowski, Dinis-Oliveira, Elneil, Hughes, Messelink, van Ophoven, Williams.

Acquisition of data: Engeler, Baranowski, Dinis-Oliveira, Elneil, Hughes, Messelink, van Ophoven, Williams.

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Drafting of the manuscript: Engeler, Baranowski, Dinis-Oliveira, Elneil, Hughes, Messelink, van Ophoven, Williams.

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