Chronic pelvic pain in women

Chronic pelvic pain can cause significant disruption to the lives of the women it affects. It can arise not only from pathology affecting any of the structures located within the pelvis and lower abdomen, but also related areas such as the skeletal system, nerves or muscles. When a specific pathophysiological cause is identified, management is tailored to this. However, for some women the underlying cause of their pelvic pain will never be identified and this can be challenging. In these instances, a multi-disciplinary approach should be used for both assessment and optimal management, to reduce the risk of fragmented care. This article focuses on the general strategies of management, rather than the treatment options for each of the multiple conditions that can contribute to chronic pelvic pain.

Key practice points

- Chronic pelvic pain is defined as intermittent or constant pain in the lower abdomen or pelvis of at least six months duration, that does not occur exclusively with menstruation or intercourse
- Women with chronic pelvic pain report a lower quality of life, with high rates of functional impairment, psychosocial distress and sexual dysfunction, risk being labelled as difficult or needy and may struggle to be believed when accessing healthcare services
- Chronic pelvic pain can arise from pathology affecting any of the structures located within the pelvis and lower abdomen, as well as other structures related to these areas, such as the skeletal system, pelvic floor muscles and nerves, or there may be no cause identified
- Assessment begins with acknowledging the pain and understanding how this affects the woman's life. Red flags should be excluded and specific aetiologies considered. A comprehensive history covers the characteristics of the pain, contributing factors and co-morbidities. Assess for musculoskeletal abnormalities, as well as performing abdominal and pelvic examination, including evaluation of pelvic floor muscles. Laboratory tests can rule out infection; ultrasound and referral for laparoscopy may be appropriate in some cases.
- Unless a specific cause is found that can be treated, management focuses on strategies for pain modulation, including exercise, diet and sleep. Analgesia and adjuvant medicines may be considered, such as paracetamol, NSAIDs, TCAs and gabapentin. The overall aim is to provide the woman with support to self-manage and be able to cope with her pain.

Part 1: Understanding chronic pelvic pain

The enigma that is chronic pelvic pain

"Twenty years ago, I would have told you that I knew everything there was to know about pelvic pain. Ten years ago, I would have told you that no one knew anything about pelvic pain. Today, I can tell you that we have learned a lot in the last few years. There is still a great deal to be learned."

Chronic pelvic pain is defined as intermittent or constant pain in the lower abdomen or pelvis of at least six months duration, that does not occur exclusively with menstruation or intercourse.² Chronic pelvic pain, however, should be considered a symptom rather than a diagnosis, and there is debate as to what the precise definition should be. Recent European guidelines recognise a more encompassing view of chronic pain and state that it is perceived to arise from structures related to the pelvis and is "often associated with negative cognitive, behavioural, sexual and emotional consequences as well as with symptoms suggestive of lower urinary tract, sexual, bowel, pelvic floor or gynaecological dysfunction".³

Chronic pelvic pain has a major impact on women's lives

Women with chronic pelvic pain report a lower quality of life, with high rates of functional impairment, psychosocial distress and sexual dysfunction.⁴ They risk being labelled as difficult or needy and may struggle to be believed when accessing healthcare services (see: "Women's experiences of living with chronic pelvic pain", over page).⁵ These women are often prescribed inappropriate analgesics, such as opioids, which does not address the underlying cause and can be associated with adverse effects.⁶ There is considerable economic cost associated with chronic pelvic pain – both for the patient, the wider health care system and society.^{7,8}

Women's experiences of living with chronic pelvic pain

Women often describe their chronic pelvic pain as relentless and overwhelming. It threatens their ability to lead a normal life. Unpredictable symptoms can make them feel powerless, and women struggle to understand why they feel so much pain without identifiable pathology. The hidden nature of pelvic pain generates a culture of secrecy which can isolate and embarrass, causing feelings of low self-esteem and mood. Chronic pelvic pain may create tension at work and at home, and have a profound effect on relationships.⁵

"I don't know if my pain is abnormal or whether this is normal for women"

"I am embarrassed to talk about my pelvic pain to others: people will think I am just moaning"

"I need to know what is causing my pain so that others believe me"

"My doctor does not listen to me or believe me, but even though I am getting nowhere, I keep going back" Four key themes have been identified that are important for women with chronic pelvic pain; women want:⁷

- To receive personal care by a supportive and understanding health care team
- 2. To be taken seriously as a patient with genuine pain
- 3. To be given an explanation as much as a cure both for women with or without identified pathology
- To be reassured that the pain is not caused by cancer, that the pain can be treated and that other women experience similar pain

Prevalence varies widely

Estimates of the prevalence of chronic pelvic pain vary widely depending on the definition used and range from 2% to 27% of adult females worldwide.^{9, 10} A 2001 New Zealand survey found that one-quarter of women (25.4%) aged between 18 and 50 years had experienced pelvic pain over the preceding three month period.¹¹ Prevalence varied by ethnicity and age, the authors, however, acknowledge that their sample group was slightly skewed towards older, more affluent women.¹¹ Māori women (18.8%) and women from other ethnicities (14.1%) were less likely to report chronic pelvic pain than non-Māori women (27.4%). The highest rates in this study were in the 26–30 and 31–35 year age groups.¹¹

What causes chronic pelvic pain?

Chronic pelvic pain can arise from pathology affecting any of the structures located within the pelvis and lower abdomen, as well as other structures related to these areas, e.g. skeletal system, pelvic floor muscles and nerves, or there may be no cause identified.^{3, 12} "Chronic pelvic pain syndrome" is the appropriate diagnosis where pain is the dominant feature in the absence of pathology.^{3, 13}

Endometriosis, chronic infection and irritable bowel syndrome frequently cause chronic pelvic pain, and specific treatment can be implemented to manage these conditions. However, in some women the pain will continue despite appropriate identification and management.¹² In some cases the pathology may be an incidental finding.¹² Although a peripheral stimulus may have produced pain initially, additional mechanisms produce chronic pain due to central nervous system modulation.³ These mechanisms may be associated with other sensory, behavioural and psychological phenomena, which is why women with chronic pelvic pain require multi-disciplinary care.³

Women with chronic pelvic pain also have a higher incidence of other chronic pain syndromes, such as bladder pain syndrome (interstitial cystitis) and fibromyalgia, as well as irritable bowel syndrome.¹⁴ There is significant overlap Table 1: Conditions that may cause or contribute to chronic pelvic pain in women^{2, 3, 8}

System	Examples of conditions affecting that system
Gynaecological	Endometriosis, adenomyosis, adhesions (secondary to infection or surgery), chronic pelvic inflammatory disease, pelvic organ prolapse, pelvic congestion syndrome, benign tumours (e.g. uterine, ovarian), vulval or vaginal pain syndromes, ovarian remnant syndrome, trapped ovary syndrome
Gastrointestinal	Constipation, irritable bowel syndrome, inflammatory bowel disease, diverticulitis and diverticulosis, chronic appendicitis or Meckel's diverticulum, adhesions
Urological	Bladder pain syndrome (interstitial cystitis), urethral pain syndrome
Neuromuscular	Trauma (e.g. secondary to vaginal delivery), surgery (e.g. any abdominal wall incision including caesarean section), pelvic floor muscle pain syndrome, vaginal muscle spasm, neuralgia from nerve entrapment or irritation, pain arising from the lower part of the spine (e.g. from sprains, strains, fractures, degenerative disease, disc lesions), sacroiliac joint dysfunction, symphysis pubis dysfunction, coccygeal pain, piriformis syndrome, myofascial pain syndrome, abdominal migraine
Psychological	Depression, anxiety, history of sexual abuse

N.B. Malignant disease is often excluded from lists of this type although it is well recognised as a cause of pelvic pain

between these conditions, e.g. similar symptoms, co-morbid conditions (particularly psychological), history of abuse (sexual or physical) and similar behavioural responses to stress and pain.¹⁴

The four key components usually associated with chronic pelvic pain are:¹⁵

- Pain arising from the end organs (pelvic and lower abdominal)
- Central sensitisation of the nervous system
- The musculoskeletal response to pain
- The psychosocial consequences of the persistent pain

Many conditions associated either with specific pathology, a chronic pain syndrome, or components of both can produce or contribute to chronic pelvic pain (Table 1).

Gero For further information, see: "The pharmacological management of endometriosis", BPJ 52 (Apr, 2013) and "Irritable bowel syndrome in adults", BPJ 58 (Feb, 2014).



Understanding chronic pain

The pathways which cause pain to persist after an injury appears to have healed are complex. A traditional definition of chronic pain might state that it is pain that continues for a longer time than expected for normal healing.¹³ In some cases, healing or repair is never complete and persistent pain may be produced by scar tissue around nerves or a neuroma. Six months is defined as the cut-off point between acute and chronic pain.¹³

The pain cycle

Acute pain begins when nociceptors (pain receptors) are stimulated due to cellular disruption or trauma. The severity and duration of pain depends on the type and extent of injury. The physiological purpose of acute pain is to cause a decrease in the person's activity in order to protect the injured body part and promote healing.

Tissue injury, nerve damage, local inflammation and ongoing activation of nociceptors can cause pain sensitisation. As a pain stimulus transitions from an acute event to continuing stimulus, neuronal changes can occur both at the level of the primary afferent fibre (carrying signals from the nociceptors to the spinal cord) or from the spinal cord to the brain. The result of these changes is an amplified sensation of pain. In addition, neural changes in the spinal cord can result in non-nociceptive fibres causing a form of hyperexcitability so that sensory inputs which would not normally cause pain (i.e. normal touch or movement) result in a pain response.¹⁶ This sensitisation results in the experience of chronic pain in the absence of injury.¹⁶ It is not known exactly why pain sensitisation persists in some people, but it is influenced by variables such as:³

- Psychological status emotional and behavioural states, mood, attentional focus, stress
- The autonomic nervous system damaged afferent fibres can develop sensitivity to sympathetic stimulation
- The endocrine system hormones released by the hypothalamic-pituitary-adrenal axis and sex hormones
- Genetics having a close relative with a chronic pain syndrome increases risk
- Clinical history a person with a previous or existing chronic pain syndrome is more likely to develop another

Referred pain is often a characteristic of chronic pelvic pain. Visceral (from the organs) and somatic (from the skin and muscles) nerves converge at the same point on the spinal cord – the central projection neuron. If visceral nerves are active for a long period of time (e.g. due to bladder pain), cross-sensitisation with the somatic nerves may occur where the brain has difficulty discerning where the pain is coming from and carries the pain back to the pelvic and abdominal muscles and skin.¹⁷

How can chronic pain be explained to patients?

When chronic pain occurs in the absence of pathophysiology, patients can feel their pain is not valid. It is important that the patient is reassured that the pain they are experiencing is real. A model has been developed to explain chronic pain to patients based on the sensitisation theory,¹⁸ and adapted as follows:

"Imagine your body is a car and your pain system is a car alarm. When you first were injured, it was like a thief breaking into your car, which set off the car alarm. Once the thief leaves and the alarm is reset, there is no reason for it to keep going. But what if the alarm keeps getting set off again and again, but no one is breaking in? This means that the alarm is too sensitive, but it is still making the same sound (i.e. pain) as when the thief was breaking in.

This is what we think happens with chronic pain – some people's "car alarm", or pain system, becomes over-sensitive after originally being set off because the wiring of their system is faulty. The pain system gets confused and gets set off with things that shouldn't normally cause pain. This can happen at any time but is more likely if you have had a serious or long-lasting injury to begin with. An exacerbating factor is how you coped with the pain in the first instance and whether it was associated with stress or anxiety. Chronic pain can be reduced by learning to manage your stress and negative thoughts. In addition, good quality sleep and exercise help suppress the neuropathic pain pathways, which in turn improves your chronic pain. Exercise also reduces muscle tension and helps you feel more relaxed."

Part 2: Investigation and management of chronic pelvic pain

A multi-disciplinary approach to diagnosis, investigation and management is required

A multi-disciplinary approach to women with chronic pelvic pain aims to consider the possibility of the many aetiologies that may be producing the pain, and subsequent sequelae such as low mood and emotional, behavioural and sexual consequences.² Primary care is an ideal place to commence assessment of a woman with chronic pelvic pain; this is likely to require multiple consultations to cover all aspects of the condition.¹⁹

If a woman localises her pain to the pelvis it should not be immediately assumed that the origin of the pain is gynaecological. However, if a woman continually presents with pain and a cause has not been identified, always consider a new or undetected underlying organic cause. This is particularly important if the pain appears to be a new type of pain or is localised to a new site.

A first priority is to understand the pain that the woman is experiencing and how it is affecting her life. The aim should be to exclude "red flag" conditions (Page 13), determine if a specific aetiology is causing the pain, provide education and advice to enable the woman to begin to understand and self-manage the pain, initiate general management strategies including lifestyle changes and appropriate analgesia, and refer for further investigations and management if required.

Taking a comprehensive history is essential

A comprehensive history allows exclusion of conditions with specific treatment options, and promotes development of a therapeutic relationship, enabling education, increased understanding and ideally acceptance of the pain.^{2, 20}

Tools like pain diaries and questionnaires that women can take home to complete can provide more detail than is possible to cover in a standard consultation. These tools help both the clinician and the woman understand her pain, as well as measuring symptom changes over time.

An example of a questionnaire for women with chronic pelvic pain is available from: www.pelvicpain.org.au/wp-content/uploads/PPFA-Patient-Questionnaire-Women-2014. pdf

The history should include questions about the woman's:²

- Pain
- Menstrual cycle
- Bowel and bladder function
- Sexual function (including any history of abuse)
- Level of functioning
- Co-morbidities
- Medicines

Pain

A detailed history of chronic pelvic pain may identify the underlying cause(s). Asking the woman what she thinks is causing her pain can provide valuable insight.

A useful mnemonic for pain history-taking is SOCRATES:^{4, 15, 21}

- Site Where is the pain? If there is more than one site, is there a site of maximal pain?
- Onset How long have you had the pain? Do you recall when the pain started? Was the onset associated with a preceding event such as childbirth or surgery? Pregnancy-related pain is often musculoskeletal (peripartum pelvic pain syndrome).
- Character Visceral pain is typically dull and diffuse with a location that can be difficult to pinpoint. Nerve damage or nerve entrapment pain is usually burning, hot or electric shock-like.
- Radiation Pain from the cervix, vagina or uterus often radiates to the lower back or buttocks. Pain from the ovaries or fallopian tubes may radiate into the medial thigh.
- Associations Are there any symptoms or signs associated with the pain? e.g. with menstruation, sexual intercourse, urination, defaecation. Pain occurring with the symptomatic triad of sexual intercourse, menstruation and defaecation may be characteristic of endometriosis.
- Time course Is there a cyclical pattern? Endometriosis pain typically commences several days prior to menstruation and continues for the first day or two of menstruation. Pain that is worse at the end of the day and related to posture may be musculoskeletal or due to pelvic congestion syndrome.

- Exacerbating and relieving factors e.g. any medicines or alternative remedies that may relieve the pain, or life events, sleep disruption, depression, anxiety or stress that may worsen the pain. Sensations such as touch or pressure from tight clothes that would normally not be painful may suggest allodynia from central sensitisation.
- Severity Chronic pain varies over time, so a monthly pain diary may be useful. The use of a simple pain assessment score can enable comparisons to be made, which is useful when evaluating treatment efficacy.

Menstrual cycle

Establish what the woman's menstrual cycle is like; whether periods are regular, heavy or light, and whether they are associated with pain. Adenomyosis or uterine leiomyomas (fibroids) may cause heavy painful periods, although adenomyosis is typically more painful. Cyclical pelvic pain is usually hormonally driven, although other conditions may also worsen around menstruation, e.g. irritable bowel syndrome and bladder pain syndrome.

Bowel function

Is there a history of constipation, diarrhoea or bloating? Try to establish the relationship of the gastrointestinal symptoms to the pain, diet, stress, menstrual cycle and weight changes. Constipation is a common contributor to lower abdominal and pelvic pain.

Bladder function

Bladder pain syndrome is irritation of the bladder wall in the absence of infection. It is associated with polyuria (small frequent volumes), nocturia, urgency, and pain that gets worse as the bladder fills and better with micturition. It can also be associated with pain with intercourse. Recurrent urinary tract infection should be excluded.

Sexual history

Pain on initial penetration suggests vulvodynia or vaginal/ pelvic muscle spasm, deep dyspareunia is associated with endometriosis, while post-coital pain can be a feature of pelvic congestion syndrome. Consider the effect that chronic pelvic pain is having on the woman's sexual relationship, as this may cause additional stress and low self and sexual confidence.

There is a complex relationship between chronic pain and a history of abuse. It is thought that childhood sexual abuse may predispose adults to develop chronic pain syndrome rather than having a direct causative effect.² Abuse as an adult, especially if this has continued since childhood, is associated with higher levels of pain-related disability and increased vulnerability.²²

Level of functioning

Establishing a baseline level of function at the initial consultation can be valuable for developing and assessing a management plan. How is the pain affecting the woman's life? Can she do the daily activities that she wants? Are there any activities that she avoids? Is the woman employed and has she required time off work? Ask about exercise habits, caffeine and alcohol intake, smoking status, relationships, social support, stresses and coping mechanisms.

Co-morbidities

Women with chronic pelvic pain may also experience headaches, back pain, fibromyalgia, depression or anxiety. Ask specifically about sleep, fatigue, appetite, mood and social isolation.⁴

Medicines

Assess the effectiveness of current and past medicines including those for ovulatory suppression, neuropathic pain or other analgesic medicines. Consider medicine adverse effects which may be aggravating the pain, e.g. by contributing to constipation.

The role of physical examination

Observing the woman walk from the waiting room may provide insight as to the degree of pain, the origin of the pain and the current level of functioning.²³ Some women may appear distressed or anxious, or be tearful and distressed with the pain.

A focused examination of the lower back and buttocks, the sacroiliac joints and the symphysis pubis may reveal postural abnormalities, limitation of movements and areas of tenderness suggesting a musculoskeletal cause.

Assessment of the pelvic floor muscles is required. This involves both an external and internal examination primarily aiming to detect myofascial trigger points but also checking for ability to contract the pelvic floor. To palpate the pelvic floor muscles externally use one finger of a gloved hand and beginning at 12 o'clock gently palpate "around-the-clock" noting areas of tense bands of tissue, possible trigger points and areas of tenderness.²³ The pelvic floor muscles should then be assessed with an internal digital examination, using the same clock face pattern, checking for tone, trigger points and tenderness.²³

Abdominal and pelvic examinations (bimanual and speculum) help identify areas of focal tenderness, the presence of any abdominal, uterine or adnexal masses, prolapse of pelvic organs, evidence of tethering or fixation of the uterus, cervical excitation, and the presence or absence of cervical discharge.^{2, 21}

Neuropathic testing is used to identify any altered areas of sensation over the lower abdomen and the perineum. Testing can initially be done using palpation with a finger (or a moistened cotton swab for the perineum); the arm or upper abdomen may be used as a baseline. Further testing can then be carried out using other stimuli as required, such as cold, hot or sharp. Areas of focal tenderness may be identified but the features that are likely to occur as a consequence of peripheral and central sensitisation and fit with a diagnosis of chronic pain are:¹³

- Allodynia a painful response to a stimulus that is not normally considered painful
- Hyperalgesia an increased response to a painful stimulus, e.g. hot, cold or sharp
- Sensory loss a decreased or absent response to either non-painful or painful stimuli, e.g. soft, sharp, hot or cold

The role of investigations

The primary aims of investigations are to rule out infection and to detect the presence of any other underlying organic pathology.

Laboratory testing

Consider the following laboratory investigations:

- Swabs to rule out sexually transmitted infections, e.g. chlamydia and gonorrhoea, and pelvic inflammatory disease (see below)
- Cervical smear if due or if there is an abnormality on examination
- Urine sample (dipstick) to exclude pregnancy and urinary tract infection (culture may then be necessary)
- Blood tests including full blood count, creatinine and electrolytes and C-reactive protein (CRP).
 N.B. CA-125 is elevated in some ovarian cancers, endometriosis, pelvic inflammatory disease, renal failure and peritoneal inflammation. It is not recommended as a screening test for malignant disease.

All women who have chronic pelvic pain and are sexually active should have swabs to rule out a sexually transmitted infection.² There may be a clear history of an acute episode or repeated episodes of pelvic inflammatory disease, but the initial episode may have been asymptomatic and unrecognised. In some women chronic pelvic inflammatory disease is only detected when fertility is desired and the woman has been unable to conceive.

Ultrasound is the first line imaging tool

Ultrasound can help to detect pelvic pathology such as uterine leiomyomas, ovarian tumours and some endometriosis. Transvaginal ultrasound can improve the identification and diagnosis of adnexal masses and adenomyosis but has a limited role in detecting peritoneal endometriosis.²

Including all relevant clinical information on the ultrasound request form will assist the radiologist in producing a more accurate and helpful report. For example, a woman with deep dyspareunia and symptoms suggestive of endometriosis may have thickened uterosacral ligaments. Knowing the woman's presenting symptoms and signs will help direct the ultrasonographer in their assessment. Advise the woman if transvaginal ultrasound is required so that they are prepared for this examination.

Magnetic resonance imaging (MRI) may be considered for the detection of adenomyosis and other pelvic pathology but it is limited in its ability to detect endometriotic deposits.²

Red flags symptoms and signs²

Symptoms and signs that are recognised as red flags in women with chronic pelvic pain and require referral include:

- Rectal bleeding
- Irregular vaginal bleeding in a woman aged over 40 years
- Post-coital bleeding
- Onset of new bowel symptoms in a woman aged over 50 years
- Excessive or unexplained weight loss
- Onset of pelvic pain in a post-menopausal woman
- Pelvic mass

Referral may be required for surgical procedures

Many women with chronic pelvic pain will go on to have a diagnostic laparoscopy if no cause for their pain has been found. Women with cyclical pain should be prescribed a hormonal treatment for three to six months prior to having a laparoscopy, e.g. combined oral contraceptive or high-dose progestins to establish if suppression of ovulation results in an improvement in pain.^{2,3} Diagnostic laparoscopy is the gold standard for the diagnosis of endometriosis and adhesions, although a cause for the pain will not be found in approximately one-third to one-half of all diagnostic laparoscopies.^{2, 15} Negative findings

can be reframed in a positive light for patients, ruling out certain pathophysiological causes for their pain.

Multi-faceted treatment is recommended for chronic pelvic pain

Treatment should focus on the often complex contributory factors rather than on a single pathological process.² This type of approach enables appropriate treatment to be initiated when underlying conditions can be identified, but also aims to reduce unnecessary and repeated presentations, investigations, referrals and invasive procedures. Education, recognition and reassurance are important parts of the management strategy.²

Lifestyle modifications

Encourage natural pain modulating systems

The key pain modulating systems are sleep and exercise. Both of these factors can dampen down the activity in neural pain pathways.

Exercise – It is widely recognised that physical exercise produces symptomatic improvements in most patients with chronic pain, yet many of these patients do not exercise because of their pain.²⁴ Resting will not necessarily improve symptoms. A sedentary lifestyle also contributes to social isolation, low mood, reduced strength and range of motion and overall a lower level of function.²⁴

Exercise:24

- Reduces pain
- Increases level of physical function
- Improves sleep
- Lessens fatigue
- Improves mood, depression and anxiety
- Reduces weight
- Mitigates inflammation

Physiotherapy can be valuable, particularly for women who have hypercontractility of the pelvic floor. Exercises which increase pelvic floor tone should be avoided as these can exacerbate pelvic floor hypercontractility.

Geven Information on exercises to relax the pelvic floor is available online, e.g. www.pelvicpain.org.au/information/women/yoga-poses-relax-pelvis/

Sleep – a complex relationship exists between sleep, mood and chronic pain states. Evidence shows that:²⁵

- Sleep dysfunction is likely to be a risk factor in the pathogenesis of chronic pain
- Pain causes sleep disturbance and poor quality sleep
- Sleep disturbance reduces the ability to cope with pain

Improving sleep quality and reducing sleep disturbance through increased exercise, effective sleep hygiene and the selective use of medicines can decrease chronic pain.

Encourage smoking cessation

Smoking is associated with higher levels of physical impairment and increased pain in patients with fibromyalgia.²⁶ A similar association is likely to be found in people with any chronic pain syndrome. Again, the relationship is complex due to:²⁶

- High rates of smoking among people with chronic pain
- Smoking is an independent risk factor for chronic pain
- Pain can make people want to smoke
- An association with mood higher rates of depression are reported in smokers with chronic pain and people who have depression cope less well with pain

Dietary modifications may help reduce pain

A high intake of fresh fruit and vegetables is known to decrease free radical/oxidative stress on the body and improve immune function.⁸ In addition, many foods and fluids can contribute to chronic pelvic pain by irritating the bladder. Minimising the intake of caffeine, citrus fruits, spicy foods, carbonated drinks and alcohol may reduce bladder irritation.²⁷ A diet high in fruit, vegetables and fluid is likely to decrease the woman's risk of constipation while a low FODMAP diet may be beneficial if irritable bowel syndrome is contributing to chronic pelvic pain.

Prescribe appropriate analgesics

Prescribe paracetamol to be used on a regular daily basis rather than "as required", particularly if there is somatic pain.³ NSAIDs are widely used for chronic pelvic pain and can be beneficial for some women, particularly if there is an inflammatory component to the pain.³

All opioids should be avoided as they can cause a paradoxical increase in sensitivity to pain, as well as the risks of addiction and tolerance.³ All opioids, including codeine, are likely to cause constipation and potentially worsen pelvic pain.

Benzodiazepines should also be avoided.

Gever For further information, see: "Helping patients cope with chronic non-malignant pain: it's not about opioids", BPJ 63 (Sep, 2014).

Adjuvant analgesics

Tricyclic antidepressants and gabapentin effect neuropathic or centrally mediated pain.³ There is some evidence that these medicines may benefit patients with chronic pelvic pain.²⁸ Advise patients that adverse effects are common, but will lessen overtime. Aim to start with low medicine doses and build up slowly or as tolerated. There is insufficient evidence for the use of selective serotonin reuptake inhibitors (SSRIs) in patients with pelvic or neuropathic pain,³ although some women may require treatment with these medicines for co-existing depression.

Tricyclic antidepressants (TCAs) have a long history of use in chronic pain (although this is an unapproved indication) and may provide relief.³ Amitriptyline is the most frequently prescribed TCA for patients with chronic pelvic pain although nortriptyline may be better tolerated. Amitriptyline or nortriptyline can be started at 5–10 mg, nightly, and increased as tolerated to a maximum of 50 to 75 mg, occasionally higher.^{3,29} TCAs should be trialled for at least six to eight weeks as they can take some time to produce benefit. Constipation is a common adverse effect which needs to be avoided.

Gabapentin can provide analgesia more rapidly than a TCA but may cause adverse effects, such as tiredness, dizziness, nausea and weight gain. Gabapentin is subsidised with Special Authority approval for patients who have been diagnosed with neuropathic pain. Gabapentin is usually initiated at a low dose, e.g. 300 mg, nightly, and then increased gradually to twice daily then three times daily up to a maximum of 3.6 g daily,²⁹ although some guidelines suggest that 2.4 g per day in divided doses should be the maximum dose when treating women with chronic pelvic pain.³

Clonidine is occasionally used as an adjuvant analgesic medicine, although this is an unapproved indication.²⁹ It is typically prescribed as a transdermal patch when it is being trialled for relief of chronic pain. Clonidine can cause dry mouth, constipation and hypotension.

Botulinum toxin A injections can reduce muscle spasm in the affected pelvic floor muscles.³⁰ This provides relief for approximately three to six months, occasionally longer. Repeated injections may have a cumulative benefit. The success rate with these injections can be improved when they are undertaken in association with pelvic floor physiotherapy.

Final thoughts

The most important thing for women with chronic pain is for their pain to be validated. In the absence of an identifiable cause, it is essential to educate women that there is no one "magic bullet" that will resolve their pain. It is a journey that both doctor and patient will go on, with the hope of finding strategies to help cope with and minimise the pain over time.

G Patient resources

The International Pelvic Pain society produces an educational document for women with chronic pelvic pain. It is available from: www.pelvicpain.org/docs/patients/basic-chronic-pelvic-pain.aspx

The Pelvic Pain Foundation of Australia also has an informative website designed for patients and their families. It can be found at: www.pelvicpain.org.au

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