NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline

Chronic pain in over 16s: assessment and management

Draft for consultation, August 2020

This guideline covers assessing and managing chronic pain in people aged 16 years and over. It should be used alongside NICE guidance for specific conditions that cause pain, including headaches, low back pain and sciatica, rheumatoid arthritis, osteoarthritis, spondyloarthritis, endometriosis and irritable bowel syndrome. It includes recommendations on managing chronic primary pain (as defined in ICD-11) for which there is no other NICE guidance. The guideline aims to reduce distress and improve quality of life by ensuring a care plan informed by a person's individual priorities, strengths, preferences, interests and abilities.

Who is it for?

- Healthcare professionals
- Commissioners and providers of services
- People with chronic pain, their families and carers

This draft guideline contains:

- the draft recommendations
- recommendations for research
- rationale and impact sections that explain why the committee made the recommendations and how they might affect practice
- the guideline context.

Information about how the guideline was developed is on the guideline's page on the NICE website. This includes the evidence reviews, the scope, and details of the committee and any declarations of interest.

The recommendations in this guideline were developed before the coronavirus pandemic. Please tell us if there are any particular issues relating to COVID-19 that we should take into account when finalising the guideline for publication.

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Contents

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in making decisions about your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

1.1 Assessing all types of chronic pain

1.1.1 When assessing and managing any type of chronic pain, follow the recommendations in the NICE guideline on patient experience in adult NHS services, particularly on:

- knowing the patient as an individual
- enabling patients to actively participate in their care, including:
  - communication
  - information
  - shared decision making.

Recognise that chronic pain can cause distress. Foster a collaborative supportive relationship.

1.1.2 Ask the person to describe how pain affects their life, and how their life may affect their pain. This might include effects on:

- lifestyle and day-to-day activities, including work and sleep disturbance
- physical and psychological wellbeing
- social interaction and relationships.

1.1.3 Ask the person about their understanding and acceptance of their condition, and that of their family, carers and significant others. This might include:

- what causes the pain
- what might happen in the future, including expectations about the pain, outcome of treatments and quality of life.

1.1.4 During discussions with the person and their family or carers (as appropriate), acknowledge the fact that the pain may not improve or may get worse.

1.1.5 Develop a care plan with the person with chronic pain. Explore their priorities, strengths, preferences, interests and abilities to inform the plan.

1.1.6 Discuss the possible benefits, risks and uncertainties of all management options for the person's condition when first developing the care plan and at all stages of care.

1.1.7 Provide advice and information relevant to the person's individual preferences, at all stages of care, to help them make decisions about managing their condition.

1.1.8 When communicating negative or normal test results, be sensitive to the risk of invalidating the person's experience of pain.

For a short explanation of why the committee made the recommendations on assessing chronic pain and how they might affect practice, see rationale and impact.

Full details of the evidence and the committee's discussion are in evidence review A: Factors that may be barriers to successfully managing chronic pain, and evidence review B: Communication between healthcare professionals and people with chronic pain.

1.2 Managing all types of chronic pain

For guidance on specific conditions that cause pain, see the NICE guidelines on headaches, low back pain and sciatica, rheumatoid arthritis, osteoarthritis, spondyloarthritis, neuropathic pain, endometriosis and irritable bowel syndrome.

Pain management programmes

1.2.1 Be aware that there was inconsistent evidence on the effectiveness of pain management programmes, so the committee made a recommendation for research.

For a short explanation of why the committee made a recommendation for research on pain management programmes, see rationale

Full details of the evidence and the committee's discussion are in evidence review C: Pain management programmes.

Social interventions

1.2.2 Be aware that no evidence on social interventions for chronic pain was identified, so the committee made a recommendation for research.

For a short explanation of why the committee made a recommendation for research on social interventions, see rationale

Full details of the evidence and the committee's discussion are in evidence review D: Social interventions.

1.3 Managing chronic primary pain

Non-pharmacological management of chronic primary pain

Exercise for chronic primary pain

1.3.1 Offer a supervised group exercise programme (for example, cardiovascular, mind–body, strength, or a combination of approaches) to people aged 16 years and over to manage chronic primary pain. Take people's specific needs, preferences and abilities into account.

1.3.2 Encourage people with chronic primary pain to carry on with their exercise for longer-term general health benefits (also see NICE guidelines on physical activity and behaviour change: individual approaches).

For a short explanation of why the committee made the recommendations on exercise and how they might affect practice, see rationale and impact

Full details of the evidence and the committee's discussion are in evidence review E: Exercise.

Psychological therapy for chronic primary pain

1.3.3 Consider acceptance and commitment therapy (ACT) or cognitive–behavioural therapy (CBT) for pain for people aged 16 years and over with chronic primary pain.

1.3.4 Do not offer biofeedback to people aged 16 years and over to manage chronic primary pain.

For a short explanation of why the committee made the recommendations on psychological therapy and how they might affect practice, see rationale and impact

Full details of the evidence and the committee's discussion are in evidence review F: Psychological therapy.

Acupuncture for chronic primary pain

1.3.5 Consider a course of acupuncture or dry needling, within a traditional Chinese or Western acupuncture system, for people aged 16 years and over to manage chronic primary pain, **but only if** the course:

- is delivered in a community setting, and
- is delivered by a band 7 (or lower) healthcare professional, and
- is made up of no more than 5 hours of healthcare professional time (the number and length of sessions can be adapted within these boundaries).

For a short explanation of why the committee made the recommendations on acupuncture and how they might affect practice, see rationale and impact

Full details of the evidence and the committee's discussion are in evidence review G: Acupuncture.

Electrical physical modalities for chronic primary pain

1.3.6 Do not offer any of the following to people aged 16 years and over to manage chronic primary pain:

- TENS
- ultrasound
- interferential therapy.

For a short explanation of why the committee made the recommendations on electrical physical modalities and how they might affect practice, see rationale and impact

Full details of the evidence and the committee's discussion are in evidence review H: Electrical physical modalities.

Manual therapy for chronic primary pain

1.3.7 Be aware that there was not enough evidence on manual therapy for chronic primary pain, so the committee made a recommendation for research.

For a short explanation of why the committee made a recommendation for research on manual therapy, see rationale

Full details of the evidence and the committee's discussion are in evidence review I: Manual therapy.

Pharmacological management of chronic primary pain

1.3.8 Consider an antidepressant, either duloxetine, fluoxetine, paroxetine, citalopram, sertraline or amitriptyline, for people aged 16 years and over

to manage chronic primary pain, after a full discussion of the benefits and risks.

Note that this is an off-label use of these antidepressants. See Prescribing medicines for more information.

1.3.9 For recommendations on reviewing treatments, see the NICE guidelines on medicines optimisation and medicines adherence.

1.3.10 For recommendations on stopping or reducing antidepressants , see the NICE guideline on depression in adults.

1.3.11 Do not offer any of the following, by any route, to people aged 16 years and over to manage chronic primary pain:

- opioids
- non-steroidal anti-inflammatory drugs
- benzodiazepines
- anti-epileptic drugs including gabapentinoids, unless gabapentinoids are offered as part of a clinical trial for complex regional pain syndrome* (see research recommendations)
- local anaesthetics, by any route, unless as part of a clinical trial for complex regional pain syndrome (see research recommendations)
- local anaesthetic/corticosteroid combinations
- paracetamol
- ketamine
- corticosteroids
- antipsychotics.

*Pregabalin and gabapentin are Class C controlled substances (under the Misuse of Drugs Act 1971) and scheduled under the Misuse of Drugs Regulations 2001 as Schedule 3. Evaluate patients carefully for a history of drug misuse before prescribing and observe patients for development of signs of misuse and dependence (MHRA, Drug Safety Update April 2019).

1.3.12 If a person with chronic primary pain is already taking any of the medicines in recommendation 1.3.11, explain the risks of continuing.

1.3.13 If a shared decision is made to stop antidepressants, opioids, gabapentinoids or benzodiazepines, be aware of the problems associated with withdrawal.

NICE is developing a guideline on medicines associated with dependence or withdrawal symptoms: safe prescribing and withdrawal management.

1.3.14 For recommendations on cannabis-based medicinal products, including recommendations for research, see the NICE guideline on cannabis-based medicinal products.

> For a short explanation of why the committee made the recommendations on pharmacological management and how they might affect practice, see rationale and impact
>
> Full details of the evidence and the committee's discussion are in evidence review J: Pharmacological management.

Terms used in this guideline

Chronic pain

Pain that persists or recurs for more than 3 months.

Chronic primary pain

Chronic primary pain is chronic pain in 1 or more anatomical regions that is characterised by significant emotional distress (anxiety, anger/frustration or depressed mood) or functional disability (interference in daily life activities and reduced participation in social roles). Chronic primary pain is multifactorial: biological, psychological and social factors contribute to the pain syndrome. The diagnosis is appropriate unless another diagnosis would better account for the presenting symptoms.

The ICD-11 definition of chronic primary pain includes chronic widespread pain, complex regional pain syndrome, chronic primary headache or orofacial pain, chronic primary visceral pain and chronic primary musculoskeletal pain.

Recommendations for research

The guideline committee has made the following recommendations for research.

Key recommendations for research

1 Pain management programmes for chronic pain

What are the optimum characteristics of a clinically and cost-effective pain management programme for people aged 16 years and over with chronic pain?

To find out why the committee made the research recommendation on pain management programmes see rationale.

2 Psychological therapy – mindfulness for chronic primary pain

What is the clinical and cost effectiveness of mindfulness therapy for managing chronic primary pain in people aged 16 years and over?

To find out why the committee made the research recommendation on mindfulness see rationale.

3 Psychological therapy – CBT for insomnia in chronic primary pain

What is the clinical and cost effectiveness of cognitive–behavioural therapy (CBT) for insomnia or CBT for insomnia and pain for managing chronic primary pain in people aged 16 years and over?

To find out why the committee made the research recommendation on CBT for insomnia see rationale.

4 Pharmacological interventions – gabapentinoids and local anaesthetics for complex regional pain syndrome

What is the clinical and cost effectiveness of gabapentinoids or local anaesthetics for managing complex regional pain syndrome in people aged 16 years and over?

To find out why the committee made the research recommendation on gabapentinoids and local anaesthetics see rationale.

5 Manual therapies for chronic primary pain

What is the clinical and cost effectiveness of manual therapy for managing chronic primary pain in people aged 16 years and over?

To find out why the committee made the research recommendation on manual therapy see rationale.

Other recommendations for research

Factors that may be barriers to successfully managing chronic pain

What risk factors enable stratification of treatment for people aged 16 years and over with chronic pain?

Repeat courses of acupuncture for chronic primary pain

What is the clinical and cost effectiveness of repeat courses of acupuncture or dry needling for managing chronic primary pain in people aged 16 years and over?

Psychotherapy for chronic primary pain

What is the clinical and cost effectiveness of psychotherapy for managing chronic primary pain in people aged 16 years and over?

Relaxation therapy for chronic primary pain

What is the clinical and cost effectiveness of relaxation therapies for managing chronic primary pain in people aged 16 years and over?

Social interventions for chronic pain

What is the clinical and cost effectiveness of social interventions aimed at improving the quality of life of people aged 16 years and over with chronic pain?

Laser therapy for chronic primary pain

What is the clinical and cost effectiveness of laser therapy for managing chronic primary pain in people aged 16 years and over?

Transcranial magnetic stimulation for chronic primary pain

What is the clinical and cost effectiveness of transcranial magnetic stimulation for managing chronic primary pain in people aged 16 years and over?

Rationale and impact

These sections briefly explain why the committee made the recommendations and how they might affect practice. They link to details of the evidence and a full description of the committee's discussion.

Assessing chronic pain

Recommendations 1.1.1 to 1.1.8

Why the committee made the recommendations

Possible barriers to successfully managing chronic pain

There was not enough evidence to indicate whether any psychological, biological or social factors predict successful pain management. The committee acknowledged the importance of a comprehensive biopsychosocial approach to assessment and management. They agreed that it is important for the healthcare professional to understand how pain is affecting a person’s life. A care plan should be based on the effects of pain on day-to-day activities, while acknowledging that it is not possible to predict what might happen in the future.

Communication between healthcare professionals and people with chronic pain

The committee agreed that the evidence on communication was in line with what was generally considered best practice. However, evidence demonstrated shortcomings in people’s experience of consultations with healthcare professionals. The committee agreed that this area needs addressing. They emphasised the fundamental importance of good communication to the experience of care for people with chronic pain, especially when many or all treatments are ineffective or not well tolerated. The committee reviewed the recommendations from the NICE guideline on patient experience in adult NHS services (CG138) alongside the qualitative evidence to identify any areas needing specific recommendations for people with chronic pain.

They agreed that the heterogeneous, complex and potentially distressing nature of the condition should be reflected in the recommendations. More specifically, a comprehensive assessment should elicit an understanding of the effects of the pain, and how this is viewed by the person and those around them. Understanding what is important to the person is the first step in developing a care plan. The committee agreed that it is important to explore a person's priorities, strengths, preferences, interests and abilities, because these can help inform the plan.

The committee highlighted the importance of honesty about the uncertainty of the prognosis, because the evidence suggested that this is valued by people with chronic pain. Evidence showed that discussions about self-management often happen late in the care pathway, or not at all. The committee considered that all relevant management options should be considered at all stages of care, including the first contact, and therefore made a recommendation to provide advice and information, relevant to the person's individual preferences, at all stages of care, to help them make decisions about managing their condition. Evidence showed that normal or negative test results can be communicated in a way that is perceived as being dismissive of pain. Therefore, the committee made a recommendation to promote sensitivity around communicating test results.

How the recommendations might affect practice

The recommendations reflect best practice, but are currently implemented to varying degrees across NHS settings and will involve a change of practice for some providers. To fully implement these recommendations for people with chronic pain, longer consultations or additional follow-up may be needed to discuss self-management and treatment options.

Full details of the evidence and the committee's discussion are in evidence review A: Factors that may be barriers to successfully managing chronic pain and evidence review B: Communication between healthcare professionals and people with chronic pain.

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Pain management programmes for chronic pain

Research recommendation

Why the committee made the recommendations

Evidence from 8 studies showed a very small improvement in quality of life with pain management programmes led by professionals compared with usual care or waiting list controls. However, benefits to quality of life were not consistent across studies and there were no benefits observed in terms of physical function and psychological distress. Where benefits were observed, they were only small. Differences in programme delivery methods, including intensity, duration, components, structure, and staffing, and aims meant that the committee were not able to determine whether there was a particular content and characteristics of a programme that could be effective. This, together with the uncertainty about cost effectiveness meant that the committee were unable to make a recommendation for or against their use. The committee decided to make a research recommendation to help determine the elements that could make up an effective pain management programme for people with chronic pain. They hoped that this research would inform future guidance.

Full details of the evidence and the committee's discussion are in evidence review C: Pain management programmes.

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Social interventions for chronic pain

Research recommendation

Why the committee made the recommendations

No evidence was identified. The committee noted that provision of social prescribing link workers is part of the NHS long term plan, and so there is already a move towards social interventions within the NHS. The committee were aware of evidence for social interventions in conditions other than chronic pain, but they agreed that this evidence could not be extrapolated as the issues faced by people with chronic pain are likely to be different from those populations. They could not make a recommendation for chronic pain without evidence on clinical and cost effectiveness. The committee decided to make a research recommendation to gather high-quality

evidence on social interventions in the NHS, specifically for adults with chronic pain. This will hopefully inform future guidance.

Full details of the evidence and the committee's discussion are in evidence review D: Social interventions.

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Exercise for chronic primary pain

Recommendations 1.3.1 and 1.3.2

Why the committee made the recommendations

Evidence from many studies showed that exercise reduced pain (23 studies) and improved quality of life (22 studies) compared with usual care in people with chronic primary pain. Benefit was seen for both short- and long-term follow-up and was consistent across different types of exercise. Most of the evidence was for professionally led supervised group exercise and for women with fibromyalgia or people with chronic neck pain. There was limited evidence comparing different types of exercise with each other although, from what was available, there was minimal difference between the types. For this reason, the committee did not specify what type of exercise should be used.

An economic model comparing exercise (all types) with no exercise was developed for this guideline and showed that exercise was likely to be cost effective (both if using only the time horizon of the trials and also when extrapolating the quality of life gain beyond the trials). The analysis used studies in which exercise was predominantly group based. The committee considered the results to be robust, and agreed that the studies used in the model were generalisable to the whole evidence review and chronic primary pain population. Exercise remained cost effective when the assumed benefits and costs were varied (sensitivity analysis).

There were no negative effects demonstrated except for more people discontinuing from exercise programmes. The committee agreed that people are more likely to continue with exercise if the programme offered suits their lifestyle and physical ability and addresses their individual health needs. They agreed that the choice of programme as well as the content should take into account people's abilities and

preferences. This might include providing individual exercise advice for different members of a group.

The committee's experience was that many people with chronic primary pain find it difficult to be physically active. The committee agreed that it is important for these people to continue physical activity after a formal exercise programme ends, but the exercise should be sustainable for the person.

How the recommendations might affect practice

The types of exercise programmes currently offered vary from place to place, often determined by the needs of the local population. In areas where supervised group exercise is currently not provided, implementing the recommendation will lead to increased resource use.

The committee discussed that the cost of engaging in physical activity after a formal exercise programme ends would be a personal cost for people with chronic primary pain, and would not fall to the NHS.

Full details of the evidence and the committee's discussion are in evidence review E: Exercise.

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Psychological therapy for chronic primary pain

Recommendations 1.3.3 and 1.3.4

Why the committee made the recommendations

ACT for chronic primary pain

Most of the evidence showed that acceptance and commitment therapy (ACT) improved quality of life and sleep, and reduced pain and psychological distress. Although clinical evidence was from a fairly small number of studies, one economic evaluation also showed ACT to be cost effective. The committee agreed that ACT was likely to offer a good balance of benefits and costs and so recommended that it should be considered as a psychological therapy for chronic primary pain. There was

not enough evidence to support a preference for ACT over cognitive–behavioural therapy (CBT) or CBT over ACT.

CBT for chronic primary pain

Most of the evidence showed that CBT for pain improved quality of life for people with chronic primary pain. A consistent benefit was not demonstrated in other outcomes, but the committee considered that the evidence may have underestimated the benefits because the studies varied in terms of the level of training of the therapists and the way the therapy was delivered. There was no strong evidence of harm. Two economic evaluations also showed CBT to be cost effective. The committee agreed that the evidence was not of high quality so they decided to recommend that CBT (for pain) is considered.

Although there was some benefit of CBT for insomnia (CBT-I), particularly for quality of life and sleep, the amount of evidence was smaller and did not include economic evidence, so was insufficient to justify a recommendation. The committee agreed to make a research recommendation for CBT-I to inform future guidance.

Biofeedback for chronic primary pain

Evidence for biofeedback was conflicting, with little evidence of benefit and some evidence of harm. For this reason, the committee decided that this should not be offered as a management option for people with chronic primary pain.

Relaxation, mindfulness and psychotherapy for chronic primary pain

There was not enough evidence for relaxation therapy, mindfulness or psychotherapy for the committee to make recommendations, but what evidence there was suggested there may be some benefit. The committee decided to make research recommendations to inform future guidance.

Hypnosis, pain education and sleep hygiene for chronic primary pain

Limited evidence showed little benefit of hypnosis and no clinically important effect of pain education, but no evidence of harm. The committee noted that education should be part of good clinical practice and is not specific to chronic primary pain. This is already addressed by the NICE guideline on patient experience in adult NHS services (CG138). It was also agreed that hypnosis is not widely used to manage

chronic primary pain in current clinical practice. The committee therefore decided not to make recommendations for these therapies.

Limited evidence showed a benefit of sleep hygiene for improving quality of life, sleep and pain. The committee considered that sleep hygiene is a component of CBT-I and evidence showed that sleep hygiene was no more effective than CBT-I. Therefore the committee decided not to make a recommendation for sleep hygiene.

How the recommendations might affect practice

The resource impact will depend on the uptake of the recommendations. CBT is used in the NHS for chronic primary pain, although it is not standard practice everywhere. ACT is a relatively new intervention but is also used to varying degrees in practice. The costs of both interventions depend on the number and length of sessions, whether they are group or individual (or face to face or virtual/online), and who they are run by. Therefore costs can vary.

Biofeedback is usually used in physiotherapy as a method of monitoring progress, rather than as a treatment in itself. The recommendation is therefore unlikely to have a significant impact on current practice.

Full details of the evidence and the committee's discussion are in evidence review F: Psychological therapy.

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Acupuncture for chronic primary pain

Recommendation 1.3.5

Why the committee made the recommendations

Many studies (27 in total) showed that acupuncture reduced pain and improved quality of life in the short term (3 months) compared with usual care or sham acupuncture. There was not enough evidence to determine longer term benefits. The committee acknowledged the difficulty in blinding for sham procedures, but agreed that the benefit compared with a sham procedure indicated a specific treatment effect of acupuncture. There was a wide variation among the studies in the type and intensity of the intervention used, and the studies were from many different

countries. The committee agreed that the type of acupuncture or dry needling should depend on the individual needs of the person with pain.

Two economic evaluations (1 in the UK) showed that acupuncture offered a good balance of benefits and costs for people with chronic neck pain. However, both studies had limitations; a notable limitation being that the costs of acupuncture seemed low. Threshold analysis based on these studies indicated the maximum number of hours of a band 6 and 7 healthcare professional's time that would make the intervention cost effective.

An original economic model was developed, which compared acupuncture with no acupuncture. The model used data from studies with usual care comparisons, not comparisons with sham acupuncture, because the committee agreed that a usual care comparison in an economic model better reflects the real world benefit of the intervention. The model showed that acupuncture was likely to be cost effective. The committee considered the results to be robust, and agreed that the studies used in the model were generalisable to the whole evidence review and chronic primary pain population. Acupuncture remained cost effective when the assumed benefits and costs were varied (sensitivity analysis).

Overall, the committee agreed that there was a large evidence base showing acupuncture to be clinically effective in the short term (3 months); the original economic modelling also showed it is likely to be cost effective. However, they were uncertain whether the beneficial effects would be sustained long term and were aware of the high resource impact of implementation. Taking these factors into account, the committee made a recommendation to consider acupuncture or dry needling for chronic primary pain, caveated by the factors likely to make the intervention cost effective. These were: only if delivered in the community, and with a maximum of 5 treatment hours (based on the average resource use in the trials in the model and on the threshold analysis), and from a band 7 (or lower) healthcare professional (based on the threshold analysis). The committee agreed that discontinuing before this total amount of course time would be an option if the person finds that the first few sessions are not effective.

No evidence was found to inform a recommendation for repeat courses of acupuncture. The committee agreed that further research would help to inform future practice and made a research recommendation.

How the recommendations might affect practice

There is variation in the availability and use of acupuncture for chronic primary pain, with a recent reduction in these services. The recommendation is expected to lead to increased use and need for acupuncture services and therefore to have a resource impact. This is due to the number of people with chronic primary pain, and acupuncture being an individual patient intervention and so staff intensive.

Full details of the evidence and the committee's discussion are in evidence review G: Acupuncture.

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Electrical physical modalities for chronic primary pain

Recommendation 1.3.6

Why the committee made the recommendations

Limited evidence showed some benefit of electrical therapies for chronic primary pain, but sample sizes were small and benefit beyond 3 months was unclear.

Laser therapy for chronic primary pain

The exception was laser therapy, which showed a benefit for patient-reported pain and quality of life in larger studies than for other electrical physical modalities. However, the therapy used in the studies varied widely, particularly in terms of wavelength, power, and the time the laser was applied to each painful area. Evidence at more than 3 months' follow-up was limited, and there was no evidence on cost effectiveness.

Taking into account the quality of the evidence, the limited long-term data and the lack of evidence on cost effectiveness, the committee decided not to make a practice recommendation for laser therapy. However, because the limited evidence was promising, they agreed to make a research recommendation to inform future guidance.

TENS, ultrasound and interferential therapy for chronic primary pain

Limited evidence for TENS showed no clinically important difference compared with sham TENS and usual care across several outcomes at less than 3 months, and no longer term evidence was identified. There was no evidence for ultrasound or interferential therapy. The committee noted these technologies have been around for some time so it is unlikely that new research would be undertaken. These treatments are being used by some in the NHS without evidence of benefit, so the committee agreed that TENS, ultrasound and interferential therapy should not be offered for chronic primary pain. Resources should be re-allocated to areas with more evidence of clinical and cost effectiveness.

PENS and transcranial direct current stimulation for chronic primary pain

There was a very limited amount of evidence for PENS and transcranial direct current stimulation (TDCS), which suggested inconsistent benefits in some outcomes only. The committee agreed this was insufficient for a recommendation. As neither intervention is widely used in current practice for chronic primary pain, they did not think further research was warranted.

Full details of the evidence and the committee's discussion are in evidence review H: Electrical physical modalities.

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Manual therapy for chronic primary pain

Research recommendation

Why the committee made the recommendations

There was only a small amount of evidence available for each of the types of manual therapy from studies of small sample sizes. The committee considered the lack of evidence for the different types of manual therapy as well as the limitations of the evidence. The committee were concerned about the quality of the evidence and the variation in the type and intensity of the therapy. For example, vigorous soft tissue techniques might be very similar in practice to mobilisation. For some types of manual therapy, there was no evidence for outcomes beyond 3 months. The committee were not able to draw any definite conclusions from the evidence about

the best type of manual therapy and so could not make recommendations for practice. However, the committee agreed that the benefits compared with usual care were promising and there was no evidence of harm. Therefore, they decided to make a research recommendation.

Full details of the evidence and the committee's discussion are in evidence review I: Manual therapy.

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Pharmacological management for chronic primary pain

Recommendations 1.3.7 to 1.3.14

Why the committee made the recommendations

Antidepressants for chronic primary pain

Evidence indicated that antidepressants (duloxetine, amitriptyline and the SSRIs fluoxetine, paroxetine, citalopram and sertraline) improved quality of life, pain and psychological distress compared with placebo. But there were some limitations in the quality and amount of the evidence. Most of the evidence was for women with fibromyalgia. However, the committee agreed that for most medicines, response to treatment would be sufficiently similar to allow recommendations to be made across all chronic primary pain conditions, even when evidence was available for only one condition. When the committee thought there was reason to distinguish between chronic primary pain conditions, this is reflected in the recommendations.

The antidepressants were considered by class, but evidence was only available for certain drugs within each class. The committee agreed these should be stated in the recommendation. No evidence was identified that compared antidepressant classes with each other, and the committee agreed that although there were some inconsistencies in benefits observed between classes, they could not assume one class to be more or less effective than another. Duloxetine (the only SNRI with evidence for chronic primary pain) had a larger amount of long-term evidence of effectiveness. However, due to the lack of head-to-head comparisons between the antidepressant classes, the committee could not recommend duloxetine in preference to the other antidepressants for which there was evidence. The decision

of which antidepressant to try should be based on a fully informed discussion with the person with chronic primary pain, taking into account the risks and benefits.

Although none of the antidepressants have marketing authorisations for chronic primary pain, there are no licensed alternatives for this indication and these medications are already used in practice.

The committee agreed that the risk of withdrawal symptoms should be considered when prescribing antidepressants and these should not be continued if they were not effective. They recommended that the recommendations in the NICE guideline on depression in adults should be followed if stopping or reducing antidepressants.

Cannabis-based medicinal products for chronic primary pain

No evidence was identified on the effectiveness of cannabis-based products for chronic primary pain, and some evidence suggested that the treatment could cause adverse events in the short term. However, this was limited evidence from a small study. Although the committee agreed that more research would be useful to inform future practice, it was decided this was adequately covered within the NICE guideline on cannabis-based medicinal products.

Opioids for chronic primary pain

No evidence was identified on the effectiveness of opioids for chronic primary pain. Although there were limitations, evidence from non-randomised studies on the long-term use (more than 6 months) of opioids for chronic pain suggested an increased risk of dependence. Based on their experience, the committee agreed that even short-term use of opioids could be harmful for a chronic condition. The lack of evidence for effectiveness of opioids, along with evidence of long-term harm, persuaded the committee to recommend against opioid use for people with chronic primary pain.

Benzodiazepines and NSAIDs for chronic primary pain

Limited evidence suggested a lack of benefit of benzodiazepines and non-steroidal anti-inflammatory drugs (NSAIDs) for chronic primary pain. Evidence suggested that psychological and physical functioning were poorer with benzodiazepines than with

placebo. Although there was no evidence for long-term use, the committee noted the addictive properties of benzodiazepines and agreed to recommend against their use for chronic primary pain.

Evidence suggested that short-term use of NSAIDs made no difference to people's quality of life, pain or psychological distress. A small amount of evidence suggested that NSAIDs reduced physical function, compared with placebo. In view of the risks of harm with NSAIDs (gastrointestinal bleeding) and the lack of evidence of short-term or long-term effectiveness, the committee decided to recommend against their use for chronic primary pain.

Anti-epileptics for chronic primary pain

Limited evidence suggested a lack of benefit of gabapentinoids for chronic primary pain. No evidence was identified on the long-term safety of gabapentinoids, however the committee were aware of reports of harm and risk of misuse and dependence highlighted by the MHRA notification of the reclassification of gabapentinoids as a class C substance controlled under the Misuse of Drugs Act 1971 and scheduled under the Misuse of Drugs Regulations 2001 as schedule 3. There was no evidence identified for any other anti-epileptics for chronic primary pain. Taking this into account, alongside the lack of evidence of effectiveness compared with placebo, the committee agreed to recommend against their use for chronic primary pain generally. They were aware that gabapentinoids are currently recommended for neuropathic pain and expert opinion within the committee suggested that complex regional pain syndrome (CRPS) is sometimes understood as a neuropathic pain disorder. Based on the expert opinion of some committee members they therefore decided to make a research recommendation for the use of gabapentinoids for CRPS to inform future practice.

Local anaesthetics for chronic primary pain

Evidence for local anaesthetics was limited. A small amount of evidence for short-term use suggested that there is either no benefit or that their use could result in worse outcomes for pain than placebo. The committee therefore agreed to recommend against the use of local anaesthetics for chronic primary pain. However, based on the expert opinion of some members of the committee, it was noted that local anaesthetics may be useful for people with CRPS who are under-represented

in randomised controlled trials. They therefore decided to make a research recommendation for the use of local anaesthetics for CRPS to inform future practice.

Paracetamol, ketamine, corticosteroids, anaesthetic/corticosteroid combinations and antipsychotics for chronic primary pain

No evidence was identified for paracetamol, ketamine, corticosteroids, anaesthetic/corticosteroid combinations, or antipsychotics. From their own experience, and from the summaries of product characteristics, the committee agreed that these medicines have possible harms. The committee agreed that not commenting on these medicines could result in their continued use in practice, which would be inappropriate given the lack of evidence and possible harms, so they recommended against the use of these treatments.

Withdrawing medicines

The committee agreed that when recommendations had been made against the use of medicines, there should be guidance for people who are already taking these. They therefore included a recommendation based on expert opinion to explain the risks of continuing a medicine, to inform a decision about whether the risks outweighed the benefits and whether the medicine should be reduced or stopped. A recommendation was also made to highlight possible withdrawal symptoms after stopping some medicines.

How the recommendations might affect practice

There is currently variation in the drugs used to treat chronic primary pain. The recommendations are likely to have a resource impact in the short term because there may be increased resource use from helping people to stop treatments, particularly opioids and gabapentinoids. SNRI antidepressants are also slightly more expensive than other types of antidepressant such as tricyclics, but this does depend on dose. In the longer term, the recommendations should reduce the use of drugs for managing chronic primary pain, with a consequent reduction in harms and cost savings. This is likely to have wider benefits both to an individual and to society by, for example, enabling people to return to the workforce.

Full details of the evidence and the committee's discussion are in evidence review J: Pharmacological management.

Return to recommendations

Context

Chronic pain is often difficult to treat. It can be associated with many different types of tissue injuries and disease processes. Sometimes no underlying disease can be found. Pain has a significant impact on individuals and their families and carers. It affects mood, sleep, mobility, role within the family, ability to work and other aspects of life. Current mood, anxiety about pain, previous experience of pain, and unpleasant life events can influence how pain is perceived.

Key facts and figures

The prevalence of chronic pain has been difficult to define: but estimates range from 8.7% to 64.4%, with a pooled mean of 31%. In the UK chronic pain may affect between one-third and one-half of the population, but it is not known what proportion of people meeting the criteria for chronic pain either need or wish for treatment.

Almost half of people with chronic pain have a diagnosis of depression and two-thirds of people are unable to work outside the home. Studies of disability in relation to a number of long-term health conditions show that pain contributes the most to disability measures.

Attempts to treat chronic pain are costly to the healthcare system. In 2016, £537 million was spent on prescribing analgesics, with at least an additional 50% cost incurred from the prescription of other drug classes such as antidepressants and anti-epileptics. Further healthcare costs include visits to primary care, referrals to secondary care for opinions from specialists, and costs of investigations and interventions, including surgery.

The economic impact of pain is high due to absenteeism, poor productivity and people with pain leaving the workforce. Painful conditions such as arthritis and back pain account for one-third of all claims for disability benefits in the UK. The annual

indirect (productivity) cost of back pain in the UK was estimated to be between £5 billion and £10.7 billion.

Current practice

There is no medical intervention, pharmacological or non-pharmacological, that is helpful for more than a minority of people with chronic pain, and benefits of treatments are modest in terms of effect size and duration. Additional morbidity resulting from treatment for chronic pain is not unusual, so it is important to evaluate the treatments we offer for chronic pain, to focus resources appropriately and to minimise harm.

The complexity of chronic pain and the association with significant distress and disability can influence clinical interactions. People often expect a clear diagnosis and effective treatment, but these are rarely available. GPs and specialists in other fields find chronic pain very challenging to manage and often have negative perceptions of people with pain. This is despite the fact that in every specialty there are some people with chronic pain. This can have important consequences for the therapeutic relationship between healthcare professionals and patients.

A clear understanding of the evidence for the effectiveness of chronic pain treatments:

- improves the confidence of healthcare professionals in their conversations about pain, and
- helps healthcare professionals and patients to have realistic expectations about outcomes of treatment.

Finding more information and resources

To find out what NICE has said on topics related to this guideline, see our web pages on neurological conditions and musculoskeletal conditions .