

**DERBYSHIRE JOINT AREA PRESCRIBING COMMITTEE
(JAPC)**

GUIDELINE FOR MANAGING NEUROPATHIC PAIN IN PRIMARY CARE

- This is an updated guideline that includes recommendations from NICE CG173
- This guideline presents a treatment plan for use before considering referral.
- If complex regional pain syndrome is suspected, refer early.
- The Neuropathic Pain Scale is useful to aid diagnosis and for detecting change in pain after treatment.
- Amitriptyline is considered by JAPC to be the most cost effective first line choice. Second line choices include duloxetine, gabapentin, and pregabalin.
- Combination therapies (e.g. TCAs and anticonvulsants) may be more practical and effective when monotherapy is ineffective rather than switching to a new treatment and could potentially reduce side effects through lower dosages.
- Prescribers should be cautious when considering prescribing strong opioids because of the risk of dependence and should consider referral. Long acting preparations are preferred in carefully selected and screened patients. Patients should be reviewed regularly.
- Risk of harm from oral morphine increases substantially at doses exceeding 120mg/day with no increase in benefit.
- JAPC advise that patients receiving opioid doses of >50mg/day morphine equivalent should be reviewed regularly (at least annually). Clinicians may seek specialist advice for doses >90mg/day morphine equivalent.
- Carbamazepine is the preferred initial treatment for trigeminal neuralgia. If not effective, not tolerated or contraindicated consider seeking expert advice from a specialist.
- Chronic pain and depression often coexist and depression may be a reason why some patients respond poorly to initial treatments.
- Referral to a pain clinic should be carefully considered before starting patients on strong opioids such as morphine
- For patients where neuropathic pain is having a significant effect on physical functioning and mood who can engage with groups, consider referral to a pain management programme (covering those parts of Derbyshire formerly under North Derbyshire and Hardwick CCGs); for patients with significant mood issues reactive to management of and adjustment to chronic pain, consider referral to Health Psychology Service (covering those parts of Derbyshire formerly under North Derbyshire and Hardwick CCGs); for patients in Southern Derbyshire, access to specialist psychological and physiotherapy services is available through Derby Royal Hospital Pain Management Clinic.
- Pregnancy: specialist referral is required particularly if the patient is planning pregnancy and on opioids.

Managing neuropathic pain in primary care

Introduction

Neuropathic pain (NeP) is defined as a pain arising as a direct consequence of a lesion or disease affecting the somatosensory system. While nociceptive pain is produced by direct damage to the tissues involved, abnormally stimulated nerves are believed to play a key role in NeP. This can result from nerve damage caused by trauma or certain conditions: Diabetes - Herpes zoster (shingles) - Trigeminal neuralgia.

NeP may often be suspected or identified through some of the classical descriptions of the pain that patients can give, such as: *'burning, shooting, tingling, electric shocks, sharp, nagging, walking on hot coals'*. The pain is often worse at night, and may be paroxysmal or continuous. Characteristic signs and symptoms are:

- Hyperalgesia – increased sensitivity to a normal pain stimulus, eg temperature
- Allodynia – pain created by a stimulus that does not ordinarily produce pain, eg application of a cotton swab, wearing of clothes
- Autonomic signs include skin changes such as oedema, shininess, change of perspiration
- Motor – dystonia, weakness and paralysis, and fasciculations.

NeP is thought to affect 8% of the UK population. Patients' beliefs and perceptions of the pain and its cause, coping strategies, mood changes, disturbed sleep, and anxiety all need to be addressed. Therefore, treating anxiety or depression first might also reduce the need for analgesics. **Set realistic expectations and treatment goals.** Achieving pain free status is not always achievable. Reduction in pain by 50% is a commonly used endpoint in clinical trials.

Screening tools can be useful to aid diagnosis: the Neuropathic Pain Scale (NPS) is a well known validated scale (see appendix 2). Evidence supports the validity of the NPS items for detecting change in pain after treatments.

Complex regional pain syndrome (reflex sympathetic dystrophy) – in this condition there is a window of opportunity to treat it before it becomes chronic and untreatable (see appendix 3). If suspected, refer early.

Pharmacological Treatment

It is useful to have an indication of when to stop a medication. There is a period of dose titration to response. If there has been no response to treatment within two-to four weeks, after titration to adequate dose, patients are unlikely to develop a response thereafter. Integral to success is regular **re-assessment** of the patient and stopping medication that is not working effectively.

Be aware of the potential to cause serotonin syndrome in some drugs used to treat neuropathic pain (e.g. amitriptyline, duloxetine, and tramadol). The characteristic symptoms of serotonin syndrome include neuromuscular hyperactivity (such as tremor, hyperreflexia, clonus, myoclonus, rigidity), autonomic dysfunction (tachycardia, blood pressure changes, hyperthermia, diaphoresis, shivering, diarrhoea), and altered mental state (agitation, confusion, mania). For more details see [SPS QA What is Serotonin Syndrome and which medicines cause it?](#)

Drug choice and doses

| Drug | Initial dosage | Max dose | Dosing (approx. cost for 6 months, November 2019 DT) | Notes |
|------------------------------|-------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tricyclics | | | | |
| Amitriptyline tablets | 10mg to 25mg once daily | 75mg at night | Increase by 10 to 25 mg weekly (or according to response and tolerability). An adequate trial should last for 6-8 weeks, with at least 2 weeks at the maximum tolerated dose (50mg at night - £ 12.06) | Amitriptyline is the 1 st line effective treatment choice for treating neuropathic pain and especially when sedation is preferred. Second line choice of TCA should be based on cost if intolerable adverse effects develop with amitriptyline- which is currently imipramine. |

Anticonvulsants

Gabapentin and pregabalin are reclassified as Schedule 3 controlled drugs from 1 April 2019
See NHS England [briefing note](#) and [advice](#) for prescribers on the risk of misuse.

| | | | | |
|--------------------------------------------------------------------------------------------|-----------------------------------|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Gabapentin capsules (not tablets)</p> <p>Second line after Amitriptyline</p> | <p>300mg day one</p> | <p>3600mg daily</p> | <p>300mg twice daily on day 2, 300mg three times daily day 3. Based on response and tolerability dose can be further increased in 300mg/day increments every 2-3 days up to a maximum of 3600mg/day.</p> <p>Minimum 1 week to reach a dose of 1800mg/day; 2 weeks to reach 2400mg/day; 3 weeks to reach 3,600mg/day.</p> <p>(300mg tds - £17.39; 600mg (2x300mg) tds - £34.78)</p> | <p>MHRA October 2017- Gabapentin has been associated with a rare risk of severe respiratory depression even without concomitant opioid medicines. Patients with compromised respiratory function, respiratory or neurological disease, renal impairment, concomitant use of CNS depressants, and elderly people might be at higher risk of experiencing severe respiratory depression.</p> |
| <p>Pregabalin Second line after Amitriptyline</p> | <p>150mg in 2-3 divided doses</p> | <p>600mg daily</p> | <p>Based on response and tolerability increase if necessary after 3-7 days to 300mg daily in 2-3 divided doses.</p> <p>If needed increased to a maximum of 600mg/day after an additional 7-day interval</p> <p>(150mg bd - £22.44)</p> | <p>Treatment option after an adequate trial of amitriptyline, and after an adequate trial of gabapentin which has shown to be effective but not tolerated. Pregabalin should not be used when gabapentin is ineffective.</p> <p>Twice daily dosing for pregabalin may be of benefit to a small group of patients over three times daily dosing for gabapentin; but will make little difference to most. Aim for twice a day dosing with pregabalin (benefit cost and compliance).</p> <p>MHRA February 2021- Pregabalin has been associated with infrequent reports of severe respiratory depression, including some cases without the presence of concomitant opioid medicines. Patients with compromised respiratory function, respiratory or neurological disease, renal impairment; those using concomitant CNS depressants; and people older than 65 years might be at higher risk of experiencing these events and adjustments in dose or dosing regimen may be necessary.</p> |
| <p>Carbamazepine 1st line for trigeminal neuralgia***</p> | <p>100mg once or twice daily</p> | <p>1600mg daily</p> | <p>Increase gradually according to response usual dose 200mg 3-4 times daily</p> <p>(200mg tds - £22.98)</p> | <p>*** Seek specialist advice or refer if the drug is not appropriate, not tolerated, or doesn't work.</p> |

Patients experiencing partial response may try a combination of TCA +/- anticonvulsant. This approach is probably more practical and could potentially reduce side effects of particular pharmacological agents through a combination of lower dosages.

Serotonin and noradrenaline reuptake inhibitor

| | | | | |
|------------------------------------------------------|------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Duloxetine Second line after Amitriptyline | 60mg daily | 60mg daily | <i>In diabetic neuropathy, discontinue if inadequate response after 2 months; review treatment at least every 3 months</i> (60mg od- £ 14.04; 120mg daily divided doses £ 28.14) | Duloxetine is only licensed for diabetic peripheral neuropathic pain thus use for other conditions is off-label. Although licensing allows dosing to 120mg (in divided doses), this has not shown consistently better efficacy and is associated with more unwanted effects and therefore not recommended by JAPC. |
|------------------------------------------------------|------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Opioids

| | | | | |
|----------------------------------------------------------------------------|---------------------|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tramadol capsules (schedule 3 CD – see MM website) | 50-100mg | 400mg daily | 50 -100 mg 3 - 4 times daily (100mg tds - £ 30.56) | Consider tramadol only if acute rescue therapy is needed as NICE advises do NOT use long-term unless advised by specialist. |
| Morphine modified release (e.g. Zomorph) | 5 -10mg twice daily | 120mg per day | Prescribers should consider referring patients before starting morphine. Titrate according to response (maximum dose 120mg/day). The use of immediate release morphine (oramorph) has a very limited role in chronic pain management; its use is in small doses for treating breakthrough pain. | Opioids should only be started after careful assessment and referral should be considered. Opioids carry the potential risk of dependency (see appendix 1) Risk of harm from oral morphine increases substantially at doses exceeding 120mg/day with no increase in benefit. |

Topical (not first-line)

| | | | |
|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Capsaicin cream 0.075% (GREY – PHN if topical preparation required) | Apply small amount (pea size) 3-4 times daily (not more than 4 hourly) | <i>After lesions have healed</i> Avoid hot shower or bath just before or after application. (Cost- 45g - £14.58) | Capsaicin cream is licensed for the symptomatic relief of post-herpetic neuralgia only after lesions have healed. Capsaicin cream is RED for painful diabetic neuropathy as per SPC. Only under the supervision of a hospital consultant. Capsaicin patches (Qutenz) is RED - requires specialist assessment and training on the use of the patch. |
| Lidocaine medicated plaster 5% (GREY – PHN only after capsaicin; DNP – all other indications) | Apply up to three plasters for up-to 12 hours within a 24 hour period | Plaster should be worn for 12 hours, and then removed for 12hours, in rotation. Discontinue after 2-4 weeks if no response. Assess on-going need regularly and discontinue if ineffective. (Ralvo is the cost-effective brand £61.54 for 30 patches) | <i>The topical therapies capsaicin and lidocaine may be useful for localised treatment (post-herpetic neuralgia) in patients whom alternative treatments have proved ineffective or where such treatments are contraindicated.</i> |

Prescribing Notes

- Higher doses than the maximum doses should be under specialist care/ supervision
- It may be appropriate to initially try regular paracetamol or an NSAID. However, simple analgesics are usually ineffective in pure neuropathic pain but may help with a coexisting nociceptive condition.

The NNTs from the respective Cochrane reviews are: TCAs about 3; gabapentin 3 to 4; pregabalin 4 to 11; duloxetine about 6. The Canadian HTA review concluded that economic analysis demonstrated that TCAs consistently dominated anticonvulsants and SNRIs and represent an optimal use of healthcare resources in neuropathic pain. First-line treatment with TCAs led to fewer health costs and more health than the other two drug classes.

Criteria for referral to Health Psychology Service (area formerly covered by North Derbyshire and Hardwick CCGs)

General Practice can refer directly to the Health Psychology service for patients with any kind of chronic pain presentation where they are interested in exploring and would benefit from an individualised psychological approach to support them to:

- manage and influence their pain symptoms
- cope with pain medication and make decisions about treatment
- adjust to changes in everyday life due to their pain and/or treatment
- recover from low mood, anxiety and stress associated with their pain and/or treatment

Inclusion criteria are adults (18+), where enduring or severe mental health issues are stable enough for a patient to be well enough to access and benefit from health psychology approach (with adequate Recovery Team assessment and support) and where any substance misuse has been recognised and been appropriately treated and managed.

Patient referrals can be made via e-mail to DCHST.health-psychology@nhs.net

Criteria for referral to Pain Management Programme (area formerly covered by North Derbyshire and Hardwick CCGs)

For adults (18+) who are experiencing difficulties with pain and who would be interested in engaging with an educational group approach, the programme combines explaining the physiological and psychological mechanisms involved in the pain experience. Exploring strategies to help improve both physical function and mood, adopting a gentle approach to making enjoyable and rewarding lifestyle changes that can significantly impact on medication use and quality of life. Many previous participants have said that attending the programme has given them the support and encouragement, guidance and confidence needed to take control of their pain and do something about it. The programme is run jointly by Health Psychology and Physiotherapy. The programme runs in Chesterfield and Clay Cross. Patients can be referred directly to the Pain Management Programme , Physiotherapy Service, Walton Hospital.

Access to Derby Royal Hospital Pain Management Clinic psychology services

There is no direct referral route but access can be arranged "in-house". Aims include for patients to:

- manage and influence their pain symptoms via values-based objectives
- adjust and adapt to changes required in everyday life to manage their pain optimally
- recover from low mood, anxiety and stress associated with their pain

For patients who would benefit from a psycho-educational group, they can be referred in-house for a half day Self-Management Session. Patients may then opt into a full Pain Management Programme, co-run between psychology, physiotherapy and Nurse Specialists. Invited into the psychological elements of Pain Clinic are adults (18+) who are ready to make changes; where enduring or severe mental health issues are stable enough to access and benefit from health psychology (with adequate Recovery Team assessment, risk monitoring and support) and where any substance misuse has been recognised and been appropriately treated and managed.

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| Document control | Date |
|---------------------------------------------------|------------|
| Insert MHRA drug safety information on pregabalin | March 2021 |

Appendix 1 – Monitoring the safety of opioids

Opioids are not just analgesics; they have a range of effects including endocrine, immunological, cognitive and emotive. Long-term opioid use is associated with numerous adverse reactions. The patients continuing management plan needs to incorporate a process of regular review for the risk and occurrence of adverse drug events. This includes monitoring the patient physically, mentally and in regard to areas of important functioning, for example the ability to drive, work, participate in hobbies, and for possible aberrant drug-related behaviours.

Opioid dosages over 120 mg (mg morphine equivalent) correlate with an increased risk of mortality

[Table 1](#) presents strategies for managing potential opioid-related adverse effects. Perceived risks (noting an absence of adverse opioid effects) and how they are addressed and managed should be documented in the treatment plan during regular clinical reviews

| Table 1: Managing opioid-induced adverse effects | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ADVERSE EFFECT | SUGGESTED STRATEGY |
| Gastrointestinal | |
| Nausea and vomiting | Reduce dose, consider alternate formulation (sublingual, transdermal), exclude chronic constipation |
| Chronic constipation and related sequelae including abdominal pain, reflux, haemorrhoids, colonic hypomotility | Recommend regular bulking agent, extra fluids, non-osmotic laxatives |
| Reduced salivary flow posing dental problems | Six-monthly dentist reviews, brushing and flossing teeth, extra fluoride treatment, encourage salivary flow after meals, diet |
| Gastro-oesophageal reflux disease | Specific treatment e.g. proton pump inhibitor such as omeprazole Consider reducing or stopping opioids |
| Neurological | |
| Impaired cognition | Periodic assessment, mini-mental state examination |
| Impaired coordination | Heel-toe gait testing |
| Sedation | Consider monitoring with Epworth Sleepiness Scale (for excessive daytime somnolence) and with family and other witness accounts (e.g. pharmacist) |
| Hyperalgesia | Consider possibility of drug interaction (e.g. benzodiazepines) and review dosages and need periodic assessment, avoid doses >120 mg (mg morphine equivalent). Management requires a dose reduction or changing to an alternative |
| Endocrine* | |
| (Note- there is insufficient evidence to recommend routine monitoring of asymptomatic patients taking opioids in the long-term for hormonal deficiencies. If endocrine impairment is demonstrated, patients should be referred to an endocrinologist) | |
| Hyperprolactinaemia (and galactorrhea) | Monitor prolactin |
| Hypogonadism | Monitor testosterone |
| Osteoporosis | Monitor from baseline, check vitamin D status, seek specialist guidance |
| Respiratory | |
| Exacerbation of obstructive sleep apnoea | Consult respiratory physician |
| Inducing central sleep apnoea | Likely contraindication (e.g. methadone), reduce dose, sleep study (polysomnography), consult respiratory physician |
| Respiratory depression | Especially in patients with type 2 respiratory failure (CO ₂ retention) and those on home oxygen therapy Deterioration requires specialist intervention and probable opioid discontinuation |
| Cardiovascular | |
| Prolonged QTc | Electrocardiogram (particularly with methadone and oxycodone) |

| Psychiatric | |
|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Mood disorder | Monitor from baseline, reduce dose and review |
| Addiction | Consult addiction specialist, consider referral to methadone program. |
| Overdosage | Prescribe small amounts (e.g. weekly supply), ensure only one prescriber and likewise pharmacist, assess patient for depression |
| Other | |
| Fluid retention and oedema | Document, reduce dose, restrict sodium, consider a diuretic |
| Occupational and driving impairment | Establish baseline and review with reference to reliable co-informants |
| Diversion potential | |
| Adopted from | |
| http://www.australianprescriber.com/magazine/35/1/20/4 | |

* Long-term administration of opioids is associated with endocrine abnormalities.

- Influences on both the hypothalamic-pituitary-adrenal axis and the hypothalamic-pituitary-gonadal axis have been demonstrated in patients taking oral opioids with consequent hypogonadism and adrenal insufficiency in both sexes.
- Hypogonadism and decreased levels of dehydroepiandrosterone sulfate have been reported in men and women.
- Hypoadrenalism -Symptoms include tiredness and/or dizziness on standing and/or Nausea/vomiting/ weight loss. If present check 9am cortisol.

Endocrine effects are probably dose related and can lead to:

- Amenorrhoea in women
- Reduced libido in both sexes
- Erectile dysfunction in men
- Infertility
- Depression and fatigue
- Patients (particularly women of childbearing age) should be told about these effects before starting opioids.

Endocrine function should be monitored regularly if a patient reports symptoms consistent with potential dysfunction, such as decreased libido, sexual dysfunction or fatigue. (NB these symptoms can also occur as part of the presentation of chronic pain)

Recommended tests include:

- blood pressure
- electrolytes (especially if tramadol is used)
- fasting glucose levels
- thyroid function tests
- serum testosterone, sex-binding globulin, LH/FSH and oestradiol levels
- bone density (in an 'at-risk' group).

If endocrine impairment is demonstrated, patients should be referred to an endocrinologist for advice regarding the benefits of hormonal replacement therapy.

There is insufficient evidence to recommend routine monitoring of asymptomatic patients taking opioids in the long-term for hormonal deficiencies.

Appendix 2 – Neuropathic pain scale

There are scales for measuring different aspects of pain. For one patient, a pain might feel extremely hot, but not at all dull, while another patient may not experience any heat, but feel like their pain is very dull. We expect you to rate very high on some of the scales below, and very low on others. We want you to use the measures that follow to tell us exactly what you experience.

1. Please use the scale below to tell us how intense your pain is. Place an “X” through the number that best describes the intensity of your pain.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

No pain

The *most intense* pain sensation imaginable

2. Please use the scale below to tell us how sharp your pain feels. Words used to describe “sharp” feelings include “like a knife,” “like a spike,” “jabbing” or “like jolts.”

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not sharp

The *sharpest* sensation imaginable (‘like a knife’)

3. Please use the scale below to tell us how hot your pain feels. Words used to describe very hot pain include “burning” and “on fire.”

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not hot

The *hottest* sensation imaginable (‘on fire’)

4. Please use the scale below to tell us how dull your pain feels. Words used to describe very dull pain include “like a dull toothache,” “dull pain,” and “like a bruise.”

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not dull

The *most dull* sensation imaginable

5. Please use the scale below to tell us how cold your pain feels. Words used to describe very cold pain include “like ice” and “freezing.”

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not cold

The *most cold* sensation imaginable (‘freezing’)

6. Please use the scale below to tell us how sensitive your skin is to light touch or clothing. Words used to describe sensitive skin include “like sunburned skin” and “raw skin.”

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not sensitive

The *most sensitive* sensation imaginable (‘raw skin’)

7. Please use the scale below to tell us how itchy your pain feels. Words used to describe itchy pain include “like poison oak” and “like a mosquito bite.”

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|----|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|----|

Not itchy

The *itchiest* sensation imaginable

8. Which of the following best describes the time quality of your pain? Please tick only one answer.

() I feel a background pain all of the time and occasional flare-ups (break-through pain) some of the time.
Describe the background pain: _____

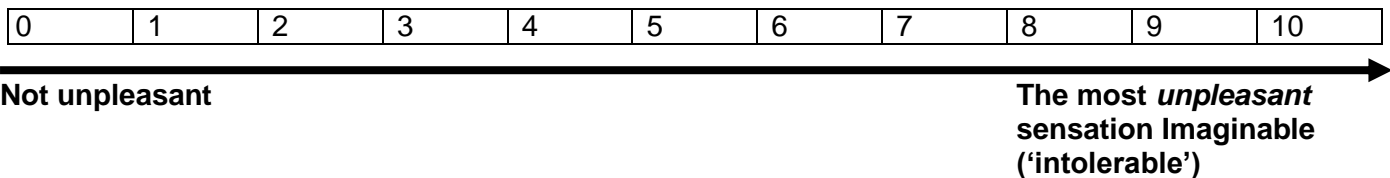
Describe the flare-up (break-through) pain: _____

() I feel a single type of pain all the time. Describe this pain: _____

() I feel a single type of pain only sometimes. Other times, I am pain-free.

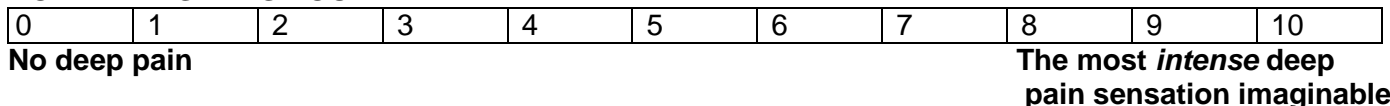
Describe this occasional pain: _____

9. Now that you have told us the different physical aspects of your pain, the different types of sensations, we want you to tell us overall how *unpleasant* your pain is to you. Words used to describe very unpleasant pain include “miserable” and “intolerable.” Remember, pain can have a low intensity, but still feel extremely unpleasant, and some kinds of pain can have a high intensity but be very tolerable. With this scale, please tell us how *unpleasant* your pain feels.

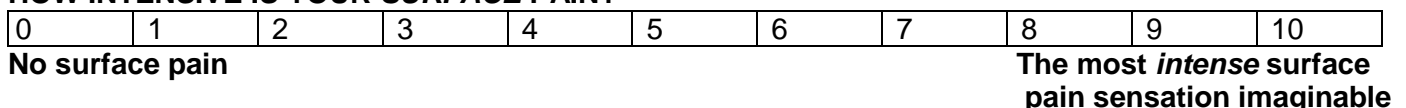


10. Lastly, we want you to give us an estimate the severity of your *deep* versus *surface* pain. We want you to rate each location of pain separately. We realise that it can be difficult to make these estimates, and most likely it will be a “best guess,” but please give us your best estimate.

HOW INTENSIVE IS YOUR *DEEP* PAIN?



HOW INTENSIVE IS YOUR *SURFACE* PAIN?



Appendix 3

Complex regional pain syndrome (CRPS)

The key symptom of CRPS is continuous, intense pain out of proportion to the severity of the injury (if an injury has occurred), which gets worse rather than better over time. CRPS most often affects one of the extremities (arms, legs, hands, or feet) and is also often accompanied by:

- "burning" pain
- increased skin sensitivity
- changes in skin temperature: warmer or cooler compared to the opposite extremity
- changes in skin colour: often blotchy, purple, pale, or red
- changes in skin texture: shiny and thin, and sometimes excessively sweaty
- changes in nail and hair growth patterns
- swelling and stiffness in affected joints
- motor disability, with decreased ability to move the affected body part

Often the pain spreads to include the entire arm or leg, even though the initiating injury might have been only to a finger or toe. Pain can sometimes even travel to the opposite extremity. It may be heightened by emotional stress.

Beyond the initial stages of CRPS when a cure is possible, there is no cure for established CRPS. Therefore, treatment is aimed at relieving painful symptoms so that people can resume their normal lives. The following therapies have been used: physical therapy, psychotherapy, sympathetic nerve block, medications.