Managing the persistent pain patient in the community

Why is it so hard?

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SDHB
Treasurer, New Zealand Pain Society
Persistent Pain 0.101

- Huge subject but very brief outline.
  - Why do people have pain that doesn’t settle?
  - Do we manage them the same as for acute pain?
  - What should we tell patients – work or rest?
  - Panicky calls
What does that mean?

Requiring an holistic / multimodal approach

BIO

SOCIAL

PSYCH

PAIN

Requiring an holistic / multimodal approach
## What is the difference?

<table>
<thead>
<tr>
<th>Acute</th>
<th>Persistent (chronic)</th>
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<tbody>
<tr>
<td>• Short duration</td>
<td>• Pain does not improve</td>
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<tr>
<td>• Identifiable cause</td>
<td>– Long past expected “healing time”</td>
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<tr>
<td>– Injury, surgery, illness</td>
<td>• Can increase over time</td>
</tr>
<tr>
<td>• Protective function</td>
<td>• Cause not always clear</td>
</tr>
<tr>
<td>• Usually reduces as healing occurs</td>
<td>• Perpetuated by plasticity changes CNS</td>
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<td>• Does not usually produce marked sensory changes in places you don’t expect to see it</td>
<td>• Sometimes marked sensory changes</td>
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<tr>
<td></td>
<td>• Can be made worse by functional avoidance &amp; psychological response</td>
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<tr>
<td></td>
<td>– Does not mean it is “psychomatic” or ‘somatiform”</td>
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Common Persistent Pain Conditions

Pain often due to Central Sensitization

- Tinnitus
- IBS
- Migrain
- Menstrual dysfunction
- Endometriosis
- Interstitial cystitis
- Back Pain
- Phantom pain
- Stump pain
- Neuralgias (PHN etc)
- CONTINUING POST OP PAIN

But what is Central sensitisation?
And does that mean it is all in the mind
A simplified version of central sensitization!
Brain Plasticity & Central Sensitization:

- “..describes changes that occur in the brain in response to repeated nerve stimulation.
- Following repeated stimulation, levels of neurotransmitters and brain electrical signals change as neurons develop a "memory" for responding to those signals.
- Frequent stimulation results in a stronger brain memory, so that the brain will respond more rapidly and effectively when experiencing the same stimulation in the future (nerve plasticity).
- Hours after a peripheral injury, eg surgery or trauma, spinal dorsal horn neuron receptive fields continue to expand.
Central sensitization

Repeated signals from peripheral stimulation can be from movement that stimulate the peripheral nerve endings. Or the brain may not differentiate between inputs from abdomen viscera due to shared nerve pathways. All interpreted as pain from a problem area.

*nerve plasticity* Receptive areas in the brain, spread to cope with input.

Depression, stress and anxiety, poor sleep increase production of transmitters that conduct pain.
Enkephalins (natural opioids)

Noradrenalin & Seratonin (inhibitory neurotransmitters)

Dynorphin (facilitory neurotransmitter)

Poor sleep, physical deactivation
Anxiety, depression, stress etc
Even though Pain is modulated in the Brain (& spinal cord)

Psychological factors don’t mean it is all in the head!
Fear avoidance model

• If one 1:6 NZs have persistent pain, why are more not disabled by it?

• Fear of pain more limiting than pain itself

Fear avoidance model

J. Vlaeyen

Avoidance or Hypervigilance → Disuse

Pain Related Fear → Depression

Pain Catastrophizing → Disability

Injury

Pain Experience

Recovery

No Fear

Confrontation

Solicitous relatives

Negative Affectivity

Threatening Illness Information

PSYCHO/SOCIAL
What does that mean in Px?

• Fear about pain = damage
• Less activity due to fear of invoking pain
• Expectation activity will cause pain = Nocebo response
  – Brain ready for input
  – Result = PAIN
• Loss of fitness
• Tense muscles due to guarding and reduced ROM
• Reduced ROM = more pain on movement
• Difficulty performing basic tasks
Functional Downward Spiral...

Pain

Avoid activity (because of pain)

Less activity

Deconditioning

Pain on mild effort

Further deconditioning

Pain on minimal effort
Lily : F42

- Back pain following epidural for caesarean 9 yrs
- Extremely angry
  - Back pain ever since- NP signs
  - Angry no back operation to fix
  - Fixated on a medical fix
- Told surgeon he should be able to fix it
- Referred as GP was resisting her requests for increasing morphine that didn’t seem to achieve anything
  - Incidental Hx sexual abuse as teenager
  - Subsequent RX led to mistrust of HCPs and medications.
Lily: F42

– Strong sense of entitlement “I want” “I told him”
  • System/other people should solve her problem
    – Eg Wanted OT referral to have rails put in shower but she could stand for >20minutes, not a falls risk

– Deactivated +++
  • Years of avoiding activity
  • Home help/husband does shopping/misses work/children have to help around house

– Claimed Morphine only thing that helps
  • increases in dose = no increase in function!

– Refused TCA, epilim
  • Mistrust of meds that “mess with head”
Linda  F 54       Things can change

• Chrones- ileostomy 6 years ago
  – Pain Chest leg, periodic migrains, post surgery abdominal pain
• Poor tolerance to medications
• Primarily a home maker
• Poor sleep
• Enjoys walking but limited
• Lost confidence in ability to do things
• Enrolled in Patient Education 8 wk Programme following MDT
  • Drove from Invercargill each week!
What changed

• Medication changed DHC
• Sleep improved through medication(nortrip) and sleep hygiene on course
• PEP – gained confidence- understood pain
• Graduated exercise programme,
  – buddied by text with a Dunedin participant for encouragement
• 6 months later -Achieved long term goal of family weekend long tramp
• Now working
Significant others:
- Solicitous behavior
- Anger

Family stress

Compensation issues

Loss of job, Financial difficulties

Access to rehab

Reinforcement of sick role
Medical profession and family

Supportive family/employers

Environment for rehab

Understanding pain

Stoic

Access to rehab

Relationship issues

Education

Culture
Financial cost of persistent pain

- 2/3 of sufferers less/unable to work outside home.
- 1:4 changed job or responsibility
- 1:5 lost job
- 7 x greater risk of losing job
- 2.2 x more GP visits

REF: “Unrelieved pain is a major health problem” www.iasp-pain.org 2004
What work challenges do the patients face

<table>
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<th>Employer</th>
<th>Pain person</th>
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<tbody>
<tr>
<td>• Expect full time</td>
<td>• Difficult to find part time or get graduated RTW</td>
</tr>
<tr>
<td>• Unreasonable expectations</td>
<td>• Longer time off harder to return</td>
</tr>
<tr>
<td>• Not keen to support graduated return</td>
<td>– confidence, explain absence</td>
</tr>
<tr>
<td>• Need fully functioning staff member</td>
<td>• More automation reducing unskilled, non-manual job vacancies</td>
</tr>
<tr>
<td>• Other workers sometimes resent special treatment</td>
<td>• Partner wanting financial contribution</td>
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</table>
What approach to take for persistent pain

• Acknowledge their pain!
  – When obvious clinical indicators not there patients often complain they are not believed

• Education *healing time* over
  – HURT DOES NOT = HARM

• Early rehab the key

• The longer people out of work less likely RTW

• Should primary care liaise with employer to negotiate the graduated RTW?
  – Could this be a nurse initiated role?

• Avoid the pitfall of waiting for each referral to make any progress
  – Physio course, orthopaedic review etc
Consistent messages

• Physio should be based on self management skills
  – exercises, activity advice to promote increased function
  – Not lots of massage, acupuncture etc that relies on continued therapist involvement

• Encourage
  – Pacing activities
  – Avoiding the boom & bust is as important as not doing enough
  – Regular activity
    • aids proprioception, balance etc
    • tolerance of daily tasks/work
    • increases endorphins to help pain
    • muscle tone & ROM
    • self esteem & confidence to do things
• **Analgesia is to aid function**
  – not keep comfy when lying around

• **Sleep hygiene**
  • Poor sleep = more pain

• **Cognitive strategies**
  • Relaxation (this is not watching TV), Mind fullness etc

• **Attention to good health**
  – Diet, good control of co morbidities
    • Eg good diabetes control to reduce progression of neuropathies etc

• **Attention to mental health problems**
Using Internet

THAT GOES... ER... GOD, I DON'T KNOW. LET'S GOOGLE IT.
Patient resources online

- Read everything critically before you recommend it.
- Does it fit with philosophy of where you work?
  - Are NZ versions the same?
- Who wrote it?
  - Do they have a good reputation?
  - Are they known?
- Is it a commercial enterprise? (particularly US)
- Beware of hogwash!
Online treatment guides

“Understanding Pain In 5 Minutes”
U tube: Hunter Integrated Pain Services

Brain man chooses 2014

Understanding Pain Brainman stops his opioids 2014

International Association for the Study of Pain
IASP®
Working together for pain relief

Recommended guidelines for Pain Management Programmes for adults

A consensus statement prepared on behalf of the British Pain Society
April 2007
To be updated April 2014
Copyright The British Pain Society 2007
Be cautious telling patients to look up drugs!
MECHANISMS OF PLACEBO ANALGESIA

Placebo

Expectation

Conditioning

Psy-Neuro Mechanisms

Placebo and Nocebo - How to Enhance Therapies and Avoid Sabotage  NZPS conference 2012
Serge Marchand, Neurosurgery Division, Sherbrooke University, Québec, Canada
MECHANISMS OF PLACEBO ANALGESIA

Nocebo

Expectation

Conditioning

Psy-Neuro Mechanisms
How we see or hear things is affected by our knowledge and experience
Beware of throwaway comments.

• What obvious to you may not be to the person in pain looking for an explanation they can understand
• Hyper-vigilance and patient’s lay interpretation leads to erroneous beliefs
2 xray interpretation reports

What do we do now doctor?

Wasn’t there a crayon in there at some point?

There’s nothing we can do now
followed Ed visit, normal xray

- Where did it come from?
- Who told her?
- How did they explain?
- Now fixated on an urgent need for gastro to sort it out!
- But won’t stop codeine as it helps a little bit!
- Confounds all usual preventive advice for constipation

"Xray shows I am impacted and that is the cause of all my pain"
Oh you have a # how did they miss that!

- Long term consequences
- Refusal to rehab, because “something was missed”
- ACC House modifications
- Impossible to help
- Always argued that she should have been diagnosed correctly
Challenging calls
Challenging calls

• Remember things said on the phone can seem to have a different context when people can’t see your face.

• Be aware of your own background
• Take the time to listen to what the patient is saying
• But don’t be afraid to reinforce the correct action ie be consistent with advice, even if it is the more difficult message to give
Sue

• Neuropathic pain following cholecystectomy years ago & depression

• Lives in Southland on a farm
  
  Some isolation

• Expected to help with farm work and do accounts

• Main coping strategy was opioids

• 2009 Referred to DPH Pain service
  
  • Over reliance on Morphine IM & Sevredol from GP (OIH)
Sue:
MDTA: Recommended anti neuropathic meds

• Gabapentin, clonidine
  • Switch Morphine to
  • Methadone - opioid of choice BD (March 2010)
    • opioid agreement as per FPM1 guidelines
    • Dose protected (BLINDED)
      – To remove placebo/Nocebo response
    • Regular bd
    • No early pickups of medication

Absolutely no injections
  – Took some time for her to consider the switch to methadone
CNS – support: Regular phone contact with, guidance, encouragement, education etc

- Husband phoned needed help
  - Take care with confidentiality
- GP phoned
  - Support - explain rationale
- Continued Patient Contact for Support
  - Ups and downs
  - Regular phone contact since
  - Crises and education

Privacy Act 1993
Health information privacy code 1994
McCallum K, (2014) Learning from Patients’ stories of Pain, Kaitiaki, July
Sue education by phone

• Consistent messages
  • Pacing, relaxation, hurt not = harm
    » Fear of pain more limiting than pain itself
  • No magic answers
  • Still had pain but fewer peaks-no GP callouts

• Sounding board
  • Check what is happening at home?
  • Anxiety and depression
  • Medications correct?
    – Taken correctly, continued

Medications
Are they the answer?
**WHO analgesic ladder - Adapted**

**Strong Pain**

- **STRONG OPIOID** Morphine, Methadone, Fentanyl patches, oxycodone
- Tramadol +/- adjuvant
- **Avoid Pethidine** neurotoxic, addictive

**Moderate Pain**

- **WEAK OPIOID** Codeine, DHC, Tramadol +/- Adjuvant

**Mild Pain**

- **NON OPIOID** Aspirin, Paracetamol, NSAIDS, +/- Adjuvants (TCA, anti-epileptics, membrane stabilisers)
First line medications for Persistent Pain

• Paracetamol
• Gabapentin tds/qds (neuropathic pain)
  • Needs SA
• Amitriptyline nocte (10-50mg)
  • Explain not for depression or prn
  • Can use nortriptyline
• Clonidine TTS1-3 patches (or 25mcgm tabs bd)
• Weak opioids
• Tramadol SR, DHC, codeine (nociceptive pain only)

As a general rule for persistent pain use the slow release preparations if available avoid short acting top ups
If someone has persistent pain are strong opioids the answer?

When less (or none) is more
OPIOID TREATMENT

CELLULAR MECHANISMS

PHARMACOLOGICAL TOLERANCE

APPARENT TOLERANCE

WORSENING PAIN STATE

OPIOID DOSE ESCALATION

2008 MAO, J. Opioid Induced Hyperalgesia, Pain Clinical Updates, Vol XV1, issue 2
OPIOID TREATMENT

CELLULAR MECHANISMS =
Glial cells & cytokines

PHARMACOLOGICAL TOLERANCE

APPARENT TOLERANCE

OPIOID DOSE ESCALATION

WORSENING PAIN STATE

2008 MAO, J. Opioid Induced Hyperalgesia, Pain Clinical Updates, Vol XV1, issue 2
Various concerns around opioids for long term use
Ask the Experts about Insights on Opioid Policy
Withholding Opioids From Patients

Aaron M. Gilson, MS, MSSW, PhD
Medscape Neurology & Neurosurgery. 2009; ©2009 Medscape
Posted 02/02/2009

Case Report
Overdose Deaths Demand a New Paradigm for Opioid Rotation

EDITORIALS AND COMMENTARY
Opioid Rotation: What Is the Rush?
• Male, minor head injury 7 months ago
• ACC now declined, Lost job

Note Date: 29-Jul-2015
****************************

Phoned for repeat, used up as above ie taking too many. For daily pickups from now on.

Rx: oxycodone hydrochloride 20 mg tablet: modified release 1 cap qid
daily pickup Cromwell Pharmacy 30 Days supply

Note Date: 27-Jul-2015
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Note Date: 17-Jul-2015
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Review. headaches ISQ and disabling, often spending day in bed. Anxiety is flaring. Constant feeling of apprehension/stress. This is making headaches worse. ACC have ? declined neurosurgery. Will re-refer neurology re headaches. Will try efexor as found citalopram cusing some increase in anxiety, had weaned down to 1/2 tab daily. Using lorazepam daily, advised need to wean off these. Consider quetiapine instead.
D. Conduct of an opioid trial
- Use long-acting oral or transdermal opioid preparations
- Set boundaries:
  - Nominate prescriber / deputy / pharmacy
  - Dispense according to risk assessment
  - Limit dose to ~ 120mg/day morphine equivalent
- Regular reassessment and documentation: 5As
  - Analgesia
  - Activity
  - Adverse effects
  - Affect
  - Aberrant behaviour
- Interval: weekly initially, no longer than monthly
- Trial duration 6-8 weeks
- Titrate dose to stability provided satisfactory 5A assessment
- Repeats contingent on monthly reports, satisfactory 5A assessment
- Involve another colleague in decision to continue treatment
- Annual specialist review recommended, where possible.

E. Goals difficult to achieve:
- Consider opioid rotation, OR
- Taper opioid to withdrawal
- Demand for increase in dose:
  - Consider change in underlying disease state
  - Consider change in 5A
  - Consider change in social situation, other (life) stressors
- Refer to pain specialist

C. Agreement regarding opioid trial
- Part of multimodal treatment plan
- Set goals based on improved function
- Informed consent
- Explicit agreement regarding:
  - One prescriber (and deputy), single pharmacy
  - No early repeats, no loss replacements
- Tapered termination if:
  - treatment goals not met
  - serious adverse outcomes
  - misuse
  - review appointments not kept
- Option for random drug monitoring: eg urine, or pill counts

B. Poor response to other reasonable therapies
- Consider non-drug options
- Consider non-opioid drug options
- Opioids can be considered before invasive options

A. Comprehensive assessment
- "Bio-": Underlying treatable condition (if possible)
- "psycho-": Beliefs, mood, impact of pain, including sleep
- "social": Effects of relationships, work, other life events
- Risk assessment for problematic opioid use:
  - History of past or current substance abuse?
  - Family history of substance abuse?
  - Active psychiatric disorder?
  - Aberrant drug taking behaviours

GUIDELINES FOR OPIOID ANALGESIA IN CHRONIC NON-CANCER PAIN
FACULTY OF PAIN MEDICINE
AUSTRALIAN AND NEW ZEALAND COLLEGE OF ANAESTHETISTS
I lost them

I dropped/spilt it

I knocked the bottle over

The dog ate it!

They fell in the toilet!

I got toothache/really bad pain/flu and needed more

I forgot they were in the drawer when I cleaned it out!

My family didn’t like me on them and threw them out!

The patch got screwed up

I won’t be back from holiday/weekend in time

They were in the car when it was stolen

The patch keeps falling off

I vomited it

The puppy chewed the methadone bottle!

policy is very strict: no early pickups for "lost medication"
Have good links with pharmacists
Summary

• The reasons people develop Persistent pain are complex

• Combination of physiological CNS plasticity which can be exacerbated by musculoskeletal changes

• Psychological and behavioural response have a marked influence on the downward spiral of deactivation which can lead to devastation social consequences for the person.
Summary continued

• The key is establishing rehabilitation early
• Encouraging RTW
• Avoiding the acute pain model of rest to avoid pain
• Medications should start simple and target the type of pain, (nociceptive +/- neuropathic)
• Long term opioid use can be counter productive but should always be under the prescribers strict control, ie no improvement = no opioid.
Summary

• Be consistent with rehab messages and don’t be swayed by the patient’s distress.

• Overall the key to Pain management is Self Management to support and empower the patient to resume control of their life

• Provide positive support for colleagues when they have difficult patients
"Consider this. If I go on this diet and exercise program, I might get so healthy you could lose me as a regular customer."

Thank You