

Special issues for treatment of pain on opioid dependence treatment

Pain in Patients with taking Opioids

- **Opioid tolerance**
 - Higher than normal opioid doses often needed
- Sometimes increased sensitivity to pain / **opioid-induced hyperalgesia (OIH)**
 - Not the same as opioid tolerance
 - Mechanisms not fully understood
 - Similar to neuropathic pain

Treatment of pain in patients with opioid dependence / on methadone

- Dying patient:
 - Use whatever dose of opioid necessary to relieve suffering
- Patient not dying:
 - If possible, use non-opioid medications
 - If pain is severe, use opioid
 - May need higher dose than normal due to opioid tolerance
 - Including increase in methadone dose
 - Watch for worsening hyperalgesia
 - Opioid hyperalgesia may require opioid rotation, and/or use of non-opioids

Chronic Pain Treatment in Patients with history of illicit opioid use

- In patients who are not imminently dying and not receiving MST, steps to minimize risk of diversion:
 - Limit amount of opioid prescribed, require patient to return regularly for new prescription
 - Assess for evidence of drug abuse (injection marks, erratic behavior, non-adherence)
 - Use long-acting opioid with DOT if possible
 - Consider “Opioid Contract” with the patient

Risks for development of chronic pain (CDC):

- Socioeconomic status appears to be a common factor in many of the subgroup differences in high-impact chronic pain prevalence
- Indicators of socioeconomic status such as education, poverty, and health insurance coverage have been determined to be associated with both general health status and the presence of specific health conditions “*as well as with patients’ success in navigating the health care system*”.
- *Identifying populations at risk is necessary to inform efforts for developing and targeting quality pain services.*

Other factors

- Early childhood adversity
- Depression / anxiety
- Previous psychological distress / trauma
- Loss of role, aspiration or opportunity
- Compensable
- Substance misuse
-

Opioid Contract

- A clear description of proper and improper opioid use, plans to assess for opioid misuse, consequences of violating the contract.
 - Use opioid only as directed
 - Do not obtain opioids from other sources
 - Opioids prescribed only at scheduled appointments, no refills for lost or stolen medications (must protect the medication)
 - Patient agrees to urine tests or other tests for improper drug use
 - No diversion of prescribed drugs
 - If contract broken, chronic pain therapy may be terminated

Pain in Patients Receiving Methadone Maintenance Therapy

- Methadone does not provide adequate pain relief when dosed for substitution therapy
 - Methadone should be considered treatment for addiction only
 - Separate treatment should be provided for pain
- No evidence that treating pain with opioid in patients receiving MMT increases relapse
- Unlikely that reports of pain in MMT patients are due to drug craving

Pain Treatment in Patients Receiving MST

- Methadone may be continued at usual dose but split BD when treating pain (or at increased dose)
- Treat pain with non-opioid medications, if possible
- If strong opioid is needed:
 - Begin with 1 – 2 x the usual starting dose
 - In case this dose is not effective (due to opioid tolerance):
 - Be prepared to titrate upward rapidly to find appropriate dose
 - Assure the patient that titration will continue until pain is relieved

Special situations for consideration of pain treatment in patients on MMT

Accident and Emergency Treatment

- Trauma treatment 'as usual'
 - May need additional analgesia and/or alternatives
 - Remember daily dosing routine for methadone
 - Communication with clinic to identify last dose

Anaesthetics and pain management

- Methadone induces massive opiate tolerance
- Higher doses of narcotics required for pain relief and satisfactory anaesthetic management
- Alternatives to narcotics preferred if possible:
 - Volatile anaesthetic gases and regional blocks
 - Non-Steroidal Anti-Inflammatory Drugs
 - Atypical opiates,
 - Local analgesia blocks
 - Physical therapies (acupuncture, massage, physiotherapy)

Acute or post-operative pain control

- Methadone dose can be increased temporarily to contribute to pain control
- Possible to transfer temporarily from methadone to IV analgesia with strong opiates (morphine/fentanyl)
 - Preferably with patient controlled systems (PCA)
 - Addition of adjuvant – Ketamine IV
 - Relapse to illicit opiates or self discharge common if analgesia inadequate
 - Remember much higher doses will be required for MMT patients
 - Transfer back to methadone by gradual transition and weaning of IV opiates

Case study - Bang

- Male, 29yrs methadone 4 months
 - Stable 90mg methadone
 - Working in building site
- Presents with painful swollen left face and gum around lower first molar tooth
 - Not known HIV positive
 - Generally poor oral hygiene and many cavities
 - Physically reasonably well
- DD ??
- Investigations ??
- Treatment ??
- Pain relief ??

Case discussion: - Tri.

- Male, 32yrs, methadone 4 months now stable on 85mg. Stopped injecting heroin 6 weeks ago. HIV+
 - Motorcycle accident with minor back injury
 - Persistent pain now after 3 weeks - poorly located around L4
 - Requesting pain medication and increase in methadone
 - Used heroin a few times when the pain was bad over the last few days
 - Taken paracetamol / codeine and ibuprofen this week as well
- DD?
- TESTS??

Tri - 2 weeks later

- Chest and lumbar spine Xrays normal
- CRP 150
- CD4: 220

- Pain increasing rather than settling and more localised
- Febrile
 - Differential diagnosis ??
 - Further tests??
 - Pain management??

Tri - ANSWERS

- DD:
- SCANS:
- BLOODS:
- ANALGESIA:
- TREATMENT:

The learning points

- Overview – the theory
- Background – the regions of origin
- Findings
- Case studies
- Conclusions and recommendations

Themes of published work re pain

- Individual and collective trauma both impact
- Disintegrated communities
- Refugee camp / journey experience of trauma
- Region of origin determine pre-existing AOD use
- Loss of role and family/cultural leaders
- Racism and barriers to learning and employment
- Culture 'shock' of new environments and laws
- Exposure to new soothing substances without cultural frameworks

When to Consider Pharmacotherapy

Chronic Pain increases substance misuse

- Medication Assisted Treatment is the new standard of care for opiates, tobacco, alcohol.
- Peak efficacy requires MAT, counselling, peer or group support and frequent physician monitoring.
- Depression and unemployment a high priority for treatment

Counselling / behaviour motivation

- CBT teaches individuals to recognize and stop negative patterns of thinking and behavior.
 - Help be aware of the stressors, situations, and feelings that lead to substance use so that the person
 - Help avoid stressors or act differently when they occur.
- Motivational enhancement therapy
 - helps people with substance use disorders to build motivation and commit to specific plans to engage in treatment and seek recovery.
 - Difficult to engage family with male domination an extra impediment
- 12-step facilitation therapy
 - Rarely helpful with refugee groups
 - Language, culture, religion,

Conclusions

Identify the need of your patients for urgent treatment
- work and remittances a high priority

Difficult to identify with all of the background and priorities of these people for whom transparency and trust are an issue

Replacement pharmacotherapies remarkably effective without transgenerational drug use or trauma. ORT daily cost a big issue.

Difficult to maintain medication adherence initially for an appropriately chronic disease trajectory – want for ‘quick fix’

Difficult care in absence of Insurance for fees, pathology, radiology or referral for specialist opinion

Language appropriate GPs just as reluctant to accept MAT
- Many have no desire to be seen in/by their own ‘community’.
- Treatment of substance misuse stigmatised

Adjuvant analgesics

- Medications that supplement primary analgesics
 - may themselves be primary analgesics
 - use at any step of WHO ladder

Adjuvant analgesics

- Especially useful for
 - Neuropathic pain
 - Opioids usually not very effective
 - Pain from bony metastases
 - Opioids effective but often not needed

Case 1

- Anh Tuan, 40-year-old farmer
- AIDS, CD4 = 34
- Burning pain hands, feet
 - initially with stavudine (d4T) + lamivudine (3Tc)
 - Symptoms disappeared when medication stopped

Case 1 (2)

- Burning pain hands, feet returned and has persisted for 6 months
 - severe
 - keeps awake at night
 - numbness in feet
 - trouble buttoning shirt
 - not responsive to high doses of opioids
- How to manage Anh Tuan's pain?

Burning and tingling is most likely neuropathic pain

- Neuropathic pain was undertreated but causes a lot of suffering! Is pregabalin the new world?

Treatment

- Tricyclic antidepressants (amitriptyline is cheap and available in Viet Nam)
- Gabapentinoids (anticonvulsants)
- Local anesthetics/anti-arrhythmics (lidocaine patch or IV lidocaine)
- Clonidine
- Corticosteroids

Tricyclic antidepressants for burning pain

- Amitriptyline
 - most extensively studied
 - 10–25 mg orally at bedtime, titrate upward as needed every 4–7 days
 - takes days or weeks to work
 - usual effective dose 50-300 mg/day
 - side effects (anticholinergic):
 - drowsiness, constipation, dry mouth, orthostatic hypotension, tachycardia
 - overdose can be lethal

Gabapentinoids for neuropathic pain

- Anticonvulsants
- Gabapentin – high doses, liable to abuse & O/D
- Pregabalin – seductive anxiolytic and sedative
- Valproate is an alternative

Bone pain

- Pain usually is constant, worse with movement
- Typically caused by metastases and pathologic fractures
 - Vertebral compression fractures are common
 - Rule out spinal cord compression & infections
- Local treatment best

Case 2

- Chi Phuong, 73-year-old with breast cancer, metastases to bone
- Morphine does not provide adequate pain control
- How to relieve Chi Phuong's pain?

Bone pain (2)

- Management
 - opioids
 - NSAIDs
 - corticosteroids
 - bisphosphonates
 - external beam radiation
 - orthopedic intervention
 - external bracing

Pain from bowel obstruction

- Causes
 - Constipation incl. 2° to opioids
 - External compression or infiltration by tumor
 - Adhesions from previous surgery
 - Inflammation from ulceration (gastric outlet obstruction)
- Associated symptoms – vomiting with or without nausea
- Examination and Imaging before treatment

Pain from bowel obstruction (2)

- Management
 - Opioid for pain
 - Corticosteroid if cause is tumor
 - Treat constipation, if present
 - Anticholinergic medications such as scopolamine to treat cramping
 - Metoclopramide to promote motility for ileus or gastroparesis
- Invasive intervention
 - Venting gastrostomy tube to drain stomach if appropriate
 - surgical reduction or bypass if appropriate for goals of care

Case 3

- Anh Cong, 67-year-old farmer
- Colon cancer, metastases to liver
- Right upper quadrant pain
 - tender liver
 - no evidence of ascites
- How to manage Anh Cong's pain?

Corticosteroids

- Many uses
- Dexamethasone
 - long half-life (>36 h), dose once / day
 - doses of 4–20 mg/day
- Prednisolone
 - doses of 25 -100mg/day

Corticosteroids (2)

- Adverse effects
 - Hyperglycemia
 - Infection risk
 - Occasionally psychosis or agitation
- Long-term adverse effects
 - Proximal muscle weakness
 - HTN
 - Osteoporosis

Acknowledgements

david.jacka@monashhealth.org