Integrating the ACT Matrix into Post-Surgical Pain Management

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Disclosures (support):

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Persistent Post-Surgical Pain and Opioid Use

- ▶ Between 10-50% of patients develop persistent postsurgical pain (Katz & Seltzer, 2009)
- ▶ 3% of surgery patients go on to develop long term opioid use (Clarke et al., 2014)
- "Chronic post-surgical pain is common, can be severe, and results in distress and disability for patients. Why has this been neglected?" (McRae, 2011)

Transitional Pain Service

(Katz, Weinrib, Fashler et al., 2015)

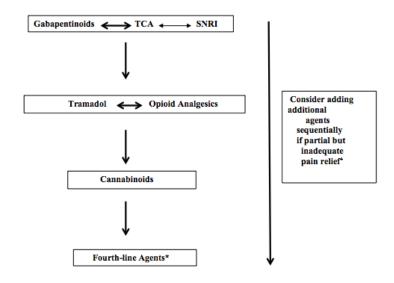
Type of Surgery	Examples
Cancer-related surgeries	Thoracic (lung), gastrointestinal, gynecologic, urologic, head and neck, breast cancer
Cardiac surgeries	Angioplasty, coronary artery bypass graft
Vascular surgeries	Below the knee amputation
Multi-organ transplant	Heart, lung, liver & kidney recipients; living liver and kidney donors

- Patients at risk of long term pain problems are referred after surgery
- Referrals from acute pain service, surgeon, or family physician

What Causes Persistent Post-Surgical Pain? (Cousins et al., 1996)

- Inflammatory pain
- Neuropathic pain
 - Damage to nerves by surgical section
 - Compression
 - Stretching
 - Ischemia
- Peripheral and central sensitization
- ► Affective component of pain

Pharmacological Management of Neuropathic Pain (Moulin et al., 2014)



Algorithm for the pharmacological management of neuropathic pain

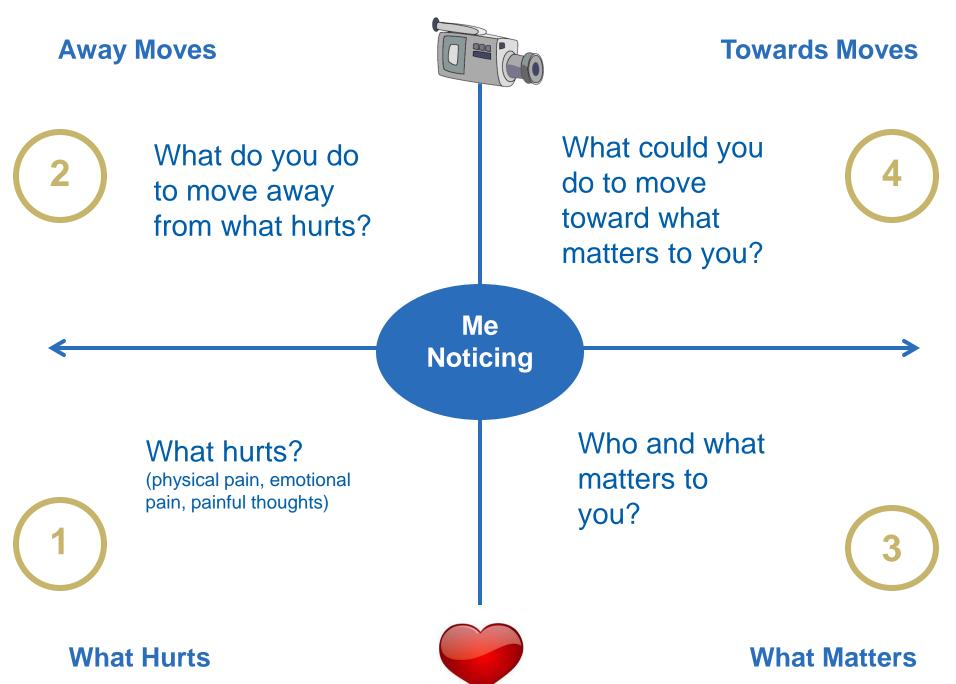
- topical lidocaine(second-line for postherpetic neuralgia), methadone, lamotrigine, lacosamide, tapentadol, botulinum toxin
- + limited randomized controlled trial evidence to support add-on combination therapy

Early Multi-Disciplinary Intervention (Katz, Weinrib, Fashler et al., 2015)

- Anesthesiology
 - Multimodal opioid sparing medication
 - Opioid weaning
- Psychology
 - Pain education
 - ACT Matrix
 - Mindfulness
- Physiotherapy
 - Exercise plans
 - Acupuncture

Can I show you a point of view?





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Mindfulness as Surfing

Ride the waves up and down
Using your breath as a surf board



Treatment Sample

- ► N = 143 post-surgical patients
 - ▶ 75 were not referred to psychology
 - ▶ 68 patients were referred to psychology after intake with physician
 - ▶ 32 completed one session (assessment)
 - ➤ 36 completed more than one session (treatment)
 - ► An average of 4 sessions

Patients Referred to Pain Psychology

- 78% reported pre-surgical chronic pain
- ▶ 55% reported pre-surgical opioid use
- Patients had an average of 4 comorbid medical conditions; 33% had cancer diagnosis
- Patients who used psychology services had higher depression and anxiety scores (HADS) than patients who did not
- No differences from non-referred in pain intensity or amount of opioid use at time of referral

Greater Reduction in Opioid Use in Referred Patients who Attended Multiple Sessions

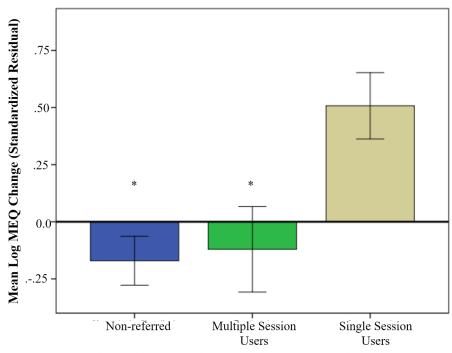


Figure 1. Change in Opioid Consumption (MEQ) according to Psychological Service Usage. Positive scores indicate higher than expected scores (increase), and negative scores indicate lower than expected scores (decline). * < .05

Lessons Learned

- Patients prefer the matrix
- Thinking carefully about away moves
 - "healthy away moves"
- ► Thinking flexibly about opioids

Thank You

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