Chronic Pain Rehabilitation Program

The Cleveland Clinic Experience
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Introduction to CPRP

- Based on Fordyce’s Behavioral Approach
- Operant conditioning and exercises.
- Psychotherapies: Cognitive Behavioral, biofeedback and Psychodynamic.
- Treatment of Chemical dependency.
- Pharmacotherapy.
- Physical therapy.
- Interventional procedures.
Will press lever for food.

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Operant Conditioning

• Behavior rewarded = Behavior Repeated.

• Unrewarded behavior is extinguished.

• Behavior intermittently rewarded is the most resistant to extinguishing.

Gains and Losses

- Security
- Nurture
- Safety
- Stress reduction
- Drugs
- Money

Gains

- Pride
- Camaraderie
- Identity
- Money
- Future
- Hope

Losses
• Are Multidisciplinary programs effective?

**MPRPs Outcomes**

• Meta-analysis

• 65 studies of multidisciplinary treatments for chronic back pain

• MPRPs
  – improvement in pain, mood.
  – return to work
  – use of healthcare

• Benefits stable over time

• Marginal quality studies / descriptions
Economic Effects of MPC Treatment

- 27 fewer surgeries/100 pts = $4050 saved per patient (@15k/op)
- Annual medical costs:
  - Average $13,000+ medical costs/yr pre treatment
  - Average $5,600 in yr after treatment
  - $7,700 / yr / patient saved following treatment
- $400,000 saved / person removed from permanent disability

Turk, D in Campbell, Cohen: Pain Treatment Centers at the Crossroads:
A Practical Conceptual Reappraisal IASP Press 1996

Structure of the Program

- Pain Physicians.
- Psychotherapists.
- Physical therapists
- Occupational therapists
- Chemical dependency counselors.
- Nurses.
- PATIENTS.
Structure of the Program

• Day Program
• 7:30am to 5 PM
• Full day.
• Multiple treatment modalities every day.
• Opiate and tranquilizer taper and discontinuation.
• Meetings after program if addicted.

Components of the program.

• Education
• Physical reconditioning
• Occupational therapy.
• Biofeedback and relaxation training
• Pharmacotherapy
• Interventional procedures.
• Psychotherapies: psychodynamic, individual, group, family.
• Treatment of psychiatric comorbidity, including addiction
• Vocational rehabilitation.
• Drug weaning
Pharmacotherapy

- Tricyclics: Amitriptyline, Nortriptyline, Maprotiline, Doxepin.
- SNRIs: Duloxetine, Venlafaxine, Milnacipran.
- Membrane stabilizers: Gabapentin, pregabalin, valproate, carbamazepine.
- Muscle relaxants: Tizandine, Cyclobenzaprine
- SSRIs: For depression.
- Remeron
- Maintenance opiates for addiction resistant to abstinence therapy: Buprenorphine formulations and rarely, Methadone.

Golden Rules

- No Heirarchy.
- Treatment in partnership between team and patients.
- Addressing Needs and ignoring Wants.
- Clear communication between treatment providers.
- DONOT ALLOW PATIENTS TO SPLIT THE TEAM.
Who is likely to do well?

• Premorbid well functioning.
• Absence of comorbid substance abuse/dependence.
• Acceptance of addiction
• Acceptance of pain.
• Cognitively intact.

What are our outcomes?

• Review of 1383 patients.
• 1070 (77%) completed the 3-4 week rehabilitation program.
• 302 (22.8%) had 6 month follow up contact.
• 228 (21.3%) had 12 month follow up.
Diagnoses

- Low back pain (33.8%)
- Total body pain (12.9%)
- Fibromyalgia (7.3%)
- Duration of pain: 9.32 years
- Admission pain intensity 7.31

- 313 (22.6%) Dropped out due to various reasons.

Outcomes: Pain
Outcomes: Disability

- Measured by PDI
  (Pain Disability Index)

![Bar graph showing PDI scores over time.]

Outcomes: Depression

- Measure: BDI

![Bar graph showing BDI scores over time.]

Outcomes

• Post Laminectomy Syndrome (n=115)

Outcomes

• Post Laminectomy Syndrome: Disability
Opioid wean outcomes

Mean Pain Intensity Self-report Values
Across Treatment Times

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<th>Value</th>
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<th>Dis</th>
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Our Opioid wean outcomes

Mean Beck Depression Inventory
Across Treatment Times

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Mean Pain Disability Index Across Treatment Times

What when SCS fails?

50 patients with SCS admitted into the rehabilitation program
What when stimulation fails?

When should you think of a multidisciplinary approach?

- Failure of conventional single therapy approach.
- Disability disproportionate to pathology.
- Significant psychosocial dysfunction.
- Incongruent pathology.
- Multiple treatment failures.
- Addiction
- Significant psychiatric comorbidities.
We can provide hope

• Mean Scores of the Outcome Variables at Admission of Patients who completed the Program by Disability Income Status Groups

But not as much as the hope of a disability check.
Case-1

• 58 year old RN with 4 year history of severe low back pain, FBSS with an ITP with morphine and bupivacaine. On MS contin 30mg TID with VAS 8-10 and PDI 52. Moderate depression and anxiety.

Case-2

• 56 Yo female with a 6 year history of idiopathic peripheral neuropathy confirmed by skin biopsy with severe pain and disability.
Case-3

• 24 year old female with lumbosacral spondylosis with severe pain and disability. On opiates, has been found unconscious on 2 occasions. Moderate depression. No SI. No other red flags.

Thank you!