

OER Case Study: Chronic Spine Pain

Patient is a 57 year old male, with an 18 year history of chronic, primarily neck pain, persistent despite multimodal, multidisciplinary management, which has included multiple spinal injections, cervical fusion, extensive courses of physical therapy, psychologic and psychiatric support, independent exercise, adaptive equipment and multimodal medication management.

Patient has several co-morbid conditions, including longstanding ADHD for which has been on Adderall, low testosterone, and moderate obstructive sleep apnea, treated successfully with BiPAP.

Has been under physiatry care for at least the last 15+ years, and on chronic opioids for about the same amount of time. Opioid dose was weaned considerably earlier in care, but he reached point where was unable to decrease further without significant negative impacts on level of pain and function, and required increase in dose of Adderall to manage worsened ADHD. Is noted he has never shown any evidence of aberrant use, with no escalation in dose over time, and has shown superb compliance with all aspects of care. I have served as primary coordinating physician for his care.

As his condition had reached a point of maintenance/supportive care, was believed to be a reasonable candidate for trial of hemp-based cannabinoids (OER).

Prior to initiation of cannabinoids, was taking the following:

- Hydromorphone 4 mg po up to 4/day most days
- Exalgo ER: 12 mg/day
- Gabapentin
- Lidoderm patches prn
- Adderall: 15 mg TID
- Testosterone

BiPAP

Patient was on exercise regimen including core stabilization, stretching, aerobic conditioning on hybrid bicycle, worked with athletic trainer, all with excellent compliance. He reported functional goals of improving tolerance to playing guitar, playing with very active family members, and improving travel tolerance.

He was started on OER with titration to therapeutic dose, and continued all other aspects of care. Tolerated this regimen well, and did not have adverse effects.

Present regimen:

- OER dose: 1-1.5 ml BID, 2 ml QHS

Case Study-

- Other medications as above, including both sustained release and short acting hydromorphone (see dose below)
- Adderall 15 mg po TID
- Self directed exercise, including cycling, bow flex,
- Foam roll
- BiPAP
- Followed by Urology for low testosterone, psychiatry and psychology

Results:

Severity of symptoms (Likert scale 0-10)

- Initial: Average 7/10
- On cannabinoids: Average 7/10*

Pain medication use:

Able to reduce opioid intake to Exalgo 8 mg po qd and hydromorphone 4 mg po BID prn. He continued to show very good tolerance, with no adverse side effects.

- Initial Morphine Equivalent Dose: 112 mg/day
- On cannabinoids: 64 mg/day
- 43% reduction in opioid use.

Excellent patient satisfaction

Quality of Life (0-10, with 0 no quality of life and miserable, 10 best imaginable)

- Prior to cannabinoids: 6/10
- post cannabinoids: 8/10
- Represents 25 % improvement

Neck Disability Index:

- Initial: 52%
- Post addition of cannabinoids: 30%,
- Represents 42% improvement.

Additional benefits:

Reports approximately 50% improvement in sleep, (no longer awakening with headaches, and dreaming has returned)

25% increase in level of functional tolerance in things such as cycling-now able to ride up to 20 miles at time with minimal increase in pain.

Able to take extended out of state car trip recently with family with minimal increase in symptoms.

Case Study-

Other: Plays guitar for up to 1 ½ hours/day-no change, but noted can do so in addition to above increased physical tolerances.

No evidence of fatigue in response to formulation over time.

No euphoria

Discussion: attempts at weaning opioids in the past were complicated by worsening pain and associated decrease in level of function. With addition of OER, was able to wean successfully with nice gains in function and improvement in quality of life, decreasing risks associated with higher dose management. Additional steps in treatment planned include lower dose and physical dependence on Adderall, and with this, may actually see further reduction in opioid use.

This patient, like many others with chronic pain, welcomed the addition of this approach to his multidisciplinary care, with a high motivation to decrease his use of opioids.