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Comparing the Relapse Rate Between Medication Assisted-only Treatment and Medication-Assisted Treatment with an Osteopathic Manipulative Treatment Regimen in Patients with Musculoskeletal Pain

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Comparing the Relapse Rate Between Medication Assisted-only Treatment and Medication-Assisted Treatment with an Osteopathic Manipulative Treatment Regimen in Patients with Musculoskeletal Pain

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Introduction

Since the opioid crisis first began in 1991, opioid-related overdoses in the United States have continued to increase dramatically, killing nearly 47,000 people in 2018, and making it one of the most pressing issues in healthcare. ¹ The most reported reason for misuse of pain relievers was to relieve physical pain. ² The increase in opioid abuse has also led to an increase in patients seeking medication-assisted treatment (MAT).

Osteopathic manipulative treatment (OMT) has been shown to have efficacy in relieving both chronic and acute pain. ^{3,4,5} No current studies have investigated the use of OMT as an adjunct treatment to MAT for patients with musculoskeletal pain and opioid dependence.



5. Seffinger, M.A., Hruby, R.J., illustrator William A. Kuchera, Evidence-Based Manual Medicine A Problem Oriented Approach. Saunders Elsevier, Copyright 2007, pg.80-83

Objectives

This study aims to evaluate the benefits of OMT in patients diagnosed with musculoskeletal pain who are seeking MAT with Buprenorphine for opioid abuse. We hypothesize that using additional OMT to treat the physical pain that underlies opioid use will reduce relapse rates in patients receiving MAT alone.

Methods

We are employing a Randomized
Controlled Trial (RCT) to compare
the number of relapses over a 90-day
course between patients receiving
OMT + MAT versus patients
receiving only MAT. After randomly
placing patients into either the control
(MAT only) or treatment group (OMT
+ MAT), all patients will follow same
12-week schedule, with patients in the
treatment group also receiving
additional OMT with each visit.

Expected Outcomes

We are currently in the data collection phase of our research; however, we anticipate that our study will show lower relapse in the treatment group compared to the control group.

Week	Visit Day	Medication Plan	Treatment Plan
1	Day 1: Initial visit and evaluation	 Rapid UDS and send out for confirmation. If in withdrawal, try to get approval for buprenorphine product and initiate treatment (this may take up to 24 hours for prior authorization or the medication to occur) 	 If medication approved, follow up in one week. If medication not approved or patient not in withdraw follow up the next day
	Day 2- Supervise induction	 Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	 New Rx for Buprenorphine product given Follow up appointment in week
2	1-week follow-up visit	 Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	 If rapid UDS is negative, negative, negative and suprenorphine production appointment in 2 weeks If rapid UDS is positive*, negative appointment in 2 weeks If rapid UDS is positive and follow up appointment in 1 week
4	2-week follow-up visit	 Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	 If rapid UDS is negative, negative, negative and follow up appointment in 2 weeks If rapid UDS is positive, negative, negative and follow up appointment in 1 week
8	4-week follow-up visit	 Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	 If rapid UDS is negative, near the Rx or Buprenorphine production appointment in 2 weeks If rapid UDS is positive*, near the Rx for Buprenorphine product given and follow up appointment in 1 week
12	4-week follow-up visit	 Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	 If rapid UDS is negative, near Rx or Buprenorphine prodesiven and follow up appointment in 2 weeks If rapid UDS is positive*, near Rx for Buprenorphine product given and follow up appointment in 1 week

If at any point in the study period, UDS is positive, patient will revert to weekly visits until UDS is negative. Once negative, patient will have 2-week and then 4-week follow-ups.

4. Licciardone JC, Brimhall AK, King LN. Osteopathic manipulative treatment for low back pain: a systematic review and meta-analysis of randomized controlled trials. BMC Musculoskelet Disord. 2005;6:43. doi: 10.1186/1471-2474-6-4310.

Wilson, Nana & Kariisa, Mbabazi & Seth, Puja & Smith, Herschel & Davis, Nicole. (2020). Drug and Opioid-Involved Overdose Deaths - United States, 2017-2018. MMWR. Morbidity and mortality weekly report. 69. 290-297. 10.15585/mmwr.mm6911a4.=

Substance Abuse and Mental Health Services Administration. (2017). Key substance use and mental health indicators in the United States: Results from the 2016 National Survey on Drug Use and Health (HHS Publication No. SMA 17-5044, NSDUH Series H-52). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. Retrieved from https://www.samhsa.gov/data/

McReynolds, T., Sheridan, B. Intramuscular ketorolac versus osteopathic manipulative treatment in the management of acute neck pain in the emergency department: a randomized clinical trial. Journal of the American Osteopathic Association. 2005 Feb; 105(2): 57-68.109.