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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

Karen Huang
Rowan University

Danielle Cooley
Rowan University

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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.



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	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> If medication approved, follow up in one week. If medication not approved or patient not in withdrawal, follow up the next day
	Day 2- Supervise induction	<ul style="list-style-type: none"> Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	<ul style="list-style-type: none"> New Rx for Buprenorphine product given Follow up appointment in 1 week
2	1-week follow-up visit	<ul style="list-style-type: none"> Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	<ul style="list-style-type: none"> If rapid UDS is negative, new Rx or Buprenorphine product given and follow up appointment in 2 weeks If rapid UDS is positive*, new Rx for Buprenorphine product given and follow up appointment in 1 week
4	2-week follow-up visit	<ul style="list-style-type: none"> Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	<ul style="list-style-type: none"> If rapid UDS is negative, new Rx or Buprenorphine product given and follow up appointment in 2 weeks If rapid UDS is positive*, new Rx for Buprenorphine product given and follow up appointment in 1 week
8	4-week follow-up visit	<ul style="list-style-type: none"> Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	<ul style="list-style-type: none"> If rapid UDS is negative, new Rx or Buprenorphine product given and follow up appointment in 2 weeks If rapid UDS is positive*, new Rx for Buprenorphine product given and follow up appointment in 1 week
12	4-week follow-up visit	<ul style="list-style-type: none"> Rapid UDS and send out for confirmation Rx for Buprenorphine product and initiate treatment 	<ul style="list-style-type: none"> If rapid UDS is negative, new Rx or Buprenorphine product given and follow up appointment in 2 weeks If rapid UDS is positive*, new Rx for Buprenorphine product given and follow up appointment in 1 week
16 and beyond	(beyond scope of this study): patients will continue with 4-week follow-ups indefinitely		

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.

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