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Case Study #1 Fibromyalgia Pain and Sleep Study

Study Purpose

The purpose of the research is to see if Drug X is effective at treating pain and sleep symptoms in patients with Fibromyalgia (FM).

Study Design

This is a prospective randomized trial of the effectiveness of Drug X to treat symptoms of pain and sleep symptoms in patients with FM. This study will compare Drug X with placebo.

This study involves a single site, the University of Washington (UW). 500 people will take part in this study. About 125 participants will receive Drug X and 125 participants will receive placebo during the study.

Population

Inclusion Criteria	Exclusion Criteria
• Adults 18 to 65	• Had psychiatric hospitalization, suicide attempt, or problems with substance abuse during the previous 6 months
• Meet ACR criteria for diagnosis of FM moderate levels of pain	• Cognitive, emotional, or interpersonal dysfunction which, in the judgment of the evaluating psychologist, would make the person inappropriate for participation
• Average pain intensity rating > 4 on 0-10 NRS	• Rheumatologic disorder or other disorder associated with severe pain
• No prior history of Drug X	• Medical condition that would make them medically unsuitable for participation in a progressive exercise program
• No regular use of opioids	• Antidepressant medication-unless medication is tapered prior to participation
• English speaking	• Positive urine drug testing revealing evidence of illicit drug use, or use of prescription drugs that the patient did not report using
• Able to provide informed consent	• Positive urine pregnancy test, women trying to conceive, or breastfeeding women

Procedures

(1) Pre-treatment evaluation: This screening visit will take place at UWMC. It will consist of a medical evaluation with the study doctor, a urine sample to test for toxicology and pregnancy (for women), a blood draw, a psychological evaluation, self-reported health questionnaires, and review of symptoms and medications.

(2) Treatment: 10 weeks of study medication. At week 3, participants will be given a total daily dose of 200 mg/day of the Drug X or placebo. They will take 50mg 4 times a day.

(3) A 10 day period during which participants gradually reduce the amount of study medication taken, until complete off it

(4) Follow-up: 4 visits: 1 week, 4 weeks, 12 weeks, and 16 weeks after completing study treatment. Visits will take place at UWMC and will involve a medical evaluation, review of symptoms, medications, side effects and adverse events

(5) Actigraphy: Participants will be given an actiwatch (Actiwatch, Philips Respironics Bend, OR) and will wear the device on their wrists for two 1 week periods before and during drug treatment to provide objective sleep data and an index of physical activity

(6) Daily diary: Participants will be asked to complete questions about daily fatigue, mood, and sleep quality throughout the study

(7) Chart review. Health information will be collected from the patient's medical record up to 6 months after completion of the study. Information will be linked to the study data

Recruitment and Consent Procedures

- FM patients will be referred from the Rheumatology Clinic and the Multidisciplinary Pain Center at the University of Washington Medical Center. The study team will send a letter describing the study to all physicians identified as Rheumatologists in the Washington State Medical Association referral base.
- Place advertisements and study flyers at UWMC, HMC, NW Hospital, Valley Medical Center, and all UW Medicine neighborhood clinics.
- Advertise in the media, local community centers, and health clinics, particularly in areas serving minorities.
- The study team will obtain consent at the screening visit

Risks

Drug X has been approved by the Food and Drug Administration (FDA) for treatment of moderate to moderately-severe pain. The study team will administer and dose Drug X according to its approved uses. Drug X is an atypical opioid in the same drug class as morphine, a narcotic. In this study, participants will be given a total daily dose between 100 to 400 mg. Drug X has been shown to be safe and to have modest benefits for patients with FM.

If randomized to receive drug therapy, participants will be prescribed Drug X tablets. The common side effects of Drug X (e.g., those reported by more than 5% of patients) are listed below.

- Headache
- Vomiting
- Drowsiness
- Constipation
- Diarrhea
- Nausea
- Dizziness

Because the study team will administer Drug X according to its FDA approved marketing, the use of Drug X in this study involving FM patients will not significantly increase risk or decrease the acceptability of the risk to study participants. The serious adverse reaction that may be associated with Drug X therapy in clinical use is a reduction in the seizure threshold for patients with epilepsy. Risk of seizure is highest among those aged 25–54 years, those with more than four Drug X prescriptions, and those with a history of alcohol abuse, stroke, or head injury.

If taken over time, Drug X can cause the body to become physically dependent ("crave it") even when it is not needed. Clinical experience has shown that psychological dependence can occur after 3 months of treatment with a dose of 400mg. Participants will receive the drug for ten weeks. They will then undergo a 10 day period, starting at study week 13, in which the drug dosage is gradually reduced. We will evaluate participants at week 15 to make sure that they are not experiencing any problems from their drug taper.

Drug X is a type of pain medicine related to morphine. Pain medicines related to morphine, called opioids, can be abused and can start addiction in some people with certain risk factors (e.g., prior history of or current substance misuse or abuse). They may also cause a person to become used to the medicine, so that stopping it quickly can cause temporary discomfort, such as nausea, belly pain, diarrhea, frequent yawning, goose bumps and runny nose. Therefore, opioid pain medications have the potential for abuse. Overdose with Drug X or taking it with other drugs or alcohol can result in life-threatening events. Individuals may experience an allergic reaction that could be life-threatening. We will instruct participants to get medical help immediately and contact the study staff if they have any of these or any other side effects during the study.

The placebo tablet will be made of a pharmacologically inactive powder. There are no reported side effects from taking tablets such as these.

The use of the activity sensor, the Actigraph Watch, to monitor daily activities may feel intrusive to some people. This type of activity tracking is highly private, and several safeguards will apply to ensure that it is not misused. Actigraphy has been shown to be well-tolerated in patients with FM. The Actigraph watch is about the size of a large wrist watch. The code used to store and

retrieve the data from the Actigraph is only available to the research staff. The participants' activities will be inferred from the sensor. In order to protect their privacy, the study team will not be looking at the monitoring information while the participant is wearing it, only after the watch has been returned.

There are no reported adverse effects associated with wearing the Actigraph Watch. It is possible that the participant could develop a rash, tenderness, or any other adverse condition from wearing the Actigraph.

There may be risks which are not yet known.

Benefits

The study offers assessment and treatment for people with FM at no charge. Although the content of the treatment protocols varies, experience with previous similar projects indicates that some participants will experience significant improvements in their symptoms.