OUTCOME ANALYSIS OF BACK MUSCLE STRENGTHENING EXERCISES IN CHRONIC LOW BACKACHE PATIENTS: A RESEARCH PROTOCOL.

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Method Article

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Abstract

Background: Pain in lower back is a prevalent musculoskeletal issue that affects a huge number of the population at a particular point during their life. Low back pain is a prevalent problem among elderly, and linked to functional restrictions and disability. To enhance their athletic abilities as well as the quality of life as a whole, in order to lessen the burden on families, societies, and countries, effective therapy for LBP has been intensively explored. Physiotherapists recommend electrotherapy, manual therapy, cognitive behavioral treatment and exercise as therapeutic choices for LBP. LBP is mostly caused by poor posture and organizational ergonomics. LBP is often treated with conservative management. Physical exercises are extremely important for the treatment of LBP.

Methodology: This exploratory trial will include 60 people with persistent low back pain. Back Strengthening exercises will be performed by the patients. The Visual Analogue Scale will be used to assess pain, and Aberdeen Low Back Pain Scale to assess functional impairment.

Discussion: This research is being done to check the effectiveness of lower back muscle strengthening activities in individuals having persistent low back pain.

Introduction

Introduction: Pain in the lower back is one of the most common musculoskeletal illnesses. LBP is mostly caused by poor posture and organizational ergonomics. LBP is often dealt with conservatively.

Physiotherapy, in the form of physical exercises, is important in treating patients.

Lower back pain makes it harder to carry out daily duties. Ache in the lower back is a major source of impairment. The thoracolumbar, lumbar, and lumbosacral regions are the most common sources of LBP. Ache in the lower back with a particular cause, such as a fracture or a tumour, necessitates therapy. Nonspecific pain in the lower back is a type of discomfort for which the cause and source of suffering are unknown. Due to its imprecise diagnostic method, most of the time pain in the lower back is misdiagnosed as piriformis syndrome which resembles other issues causing discomfort in the leg. Low back discomfort can be relieved with early management. The literature and aetiology already point to a link between exercise and muscular strength. Various techniques are carried out to alleviate discomfort and impairment. Several systematic reviews have been undertaken since the conclusion of research on exercises for the treatment of pain in the lower back to objectively examine and evaluate the relevance and efficacy of physiotherapy for patients having ache in the lower back. CLBP has been associated with a lack of trunk-to-lower-limb movement synchronization during lifting.

Reagents

METHODOLOGY

STUDY SETTING:
The research will be conducted at the outpatient department of Ravi Nair Physiotherapy College after gaining ethical approval from the Datta Meghe Institute of Medical Science's Institutional Ethical Committee.

STUDY DESIGN AND SAMPLE SIZE

It's an experimental study. The participant's number enrolled will be 60 (n=60)

PARTICIPANTS

INCLUSION CRITERIA: Those with chronic lower back pain, both genders, and ages 18-55 were included in the study.
CRITERIA FOR EXCLUSION:

Participants who underwent some sort of surgery for ache in the lower back.

Participants having a history of back injuries and had lost function.

Those suffering from listhesis and lumbar radiculopathy.

Any abdominal surgery that has recently taken place.

Equipment

PARTICIPANT TIMELINE

The trial will last a year and the intervention will last two weeks, participants will be enrolled during the first 11 months of the study, allowing for a successful completion of the two-week intervention. The assessment will take place on the first day of the visit, and at the end of the intervention (2nd week).

IMPLEMENTATION

Randomization will be overseen by the study coordinator and main investigator. The pretest and post-test will be completed by the participants.

Procedure

STUDY PROCEDURE

Following the ethical committee's approval. The participants will be given a thorough description of the technique, and their informed consent will be obtained. The study will cover all people who are willing to participate.

A pre-test will be carried out by using a visual analogue scale and Aberdeen low back pain scale. After that patient will be asked to perform back strengthening exercises given below. After two weeks post-test will be carried out using the same scales.

The following back strengthening exercises are included:

Lower abdominal exercises: While completing these motions, the patient should lie in a supine lying position, knee flexed, feet flat on the couch. Raise both knees to his sternum. Under his knees, place both hands as close to his chest as possible. The method should be done five times with the patient without elevating his or her head.

The patient is instructed to drive his lower back into the floor by pulling his lower abdominal muscles up and in.

The back should be supported and slowly inhale and exhale. Hold the position for a total of three seconds. Take a deep inhale and don't hold your breath.

Leg raises: The patient should lie down on his stomach. Raise one leg from the floor by tightening the muscles in that leg. The patient is encouraged to raise one leg to a count of five before lowering it to the floor and repeating with the other leg.

The patient should flex the knees and point the sole toward the ceiling during this session. Raise one thigh 6 inches above the floor by lifting the foot towards the ceiling. Return to its original position slowly. Rep 5 more times.

The ache in the lower back is a common ailment that hampers the daily living of so many people.

The Aberdeen Low Back Pain Scale is used to quantify pain on the lumbar side from L2 to L5.

Troubleshooting

Time Taken
The trial will last a year and the intervention will last two weeks, participants will be enrolled during the first 11 months of the study, allowing for a successful completion of the two-week intervention. The assessment will take place on the first day of the visit, and at the end of the intervention (2nd week).

**Anticipated Results**

The techniques effect on pain and disability in people with low back pain will be utilized to draw conclusions, which will aid patients and therapist in a better approach for treating such patients.

**References**


