

Low Back Exercise Program

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EXS 400

Professor Alisa Blazek

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Client Information

Name: Dr. Hairville

Age: 47

Medications: NSAIDs

Health History: Low back pain due to degenerative changes in L4 and L5 (no spinal abnormality or nerve root problems)

Pre-Exercise Recommendations

Complete PAR-Q+ to determine health status and uncover any additional underlying health concerns. Obtain medical clearance from primary physician and gain insight into regular use of NSAIDs and the effect it is having on stomach. Take resting vital signs including blood pressure and heart rate to develop a baseline.

Four-Week Exercise Plan

Frequency: Three times per week with two sessions of strength and flexibility training and one session of aerobic exercise. Resistance training will be done with a minimum of 48 hours in between sessions. Aerobic exercise will be encouraged in his personal time at least 5 days a week for a total of 30 minutes a day, accumulated or continuous, so he can incorporate some form of activity in his free time.

Intensity: Low-intensity resistance exercises and low-impact aerobic exercise for the first two weeks. Progress to higher repetitions before increasing amount of weight. Maintain low-impact aerobic exercise throughout total program to prevent additional pressure on lower lumbar. Flexibility exercises will be performed with 15-second hold time and will be increased to 20-second hold time if tolerable after two weeks.

Duration: 30-minute exercise sessions with 5-minute warm-up and 15-minute cooldown including flexibility exercise. Total session time of 50 minutes.

Type: Aerobic, resistance, and flexibility exercises. Flexibility exercises will be performed at the end of each aerobic and resistance training session. A 5-minute warm-up will be done at the start of each session to include ballistic movements to prepare him for the workout. If extreme discomfort or pain is experienced at any point the session will be terminated.

Aerobic: Low-impact exercise such as walking or recumbent cycling for 30 minutes. Heart rate will be taken before, during, and after exercise to ensure appropriate levels are being reached and maintained.

Resistance: 30-minute sessions. One session would focus on trunk and abdominal strength training and the second session would focus on upper and lower body strength exercises. 2 sets of 10 repetitions (each side) for the first two weeks, progressing to 3 sets of 15 repetitions for each exercise. Weights will be at 50% 1RM. Certain exercises will be held for specific amount of time as indicated below.

Session 1: Superman/Banana 10 seconds each side, 10 times. Scissor kicks. Bicycle crunches. Plank 30 seconds. Side plank 30 seconds each side. Lat pulldown. TRX row. TRX push-ups.

Session 2: Wall sit for 30 seconds. Weighted squats using squat rack. Leg press. Shoulder press. Triceps pulldown. Biceps curl.

Flexibility: 15 minutes at the end of each training session. Stretches held for 15 seconds for the first two weeks, then held for 20 seconds if tolerable.

Exercises: Pelvic tilt. Glute bridge. Rotational stretch. Knee to chest. Cat/Cow. Thread the needle. Child's pose. Cobra pose. Downward dog. Slight back bend.

Follow-up

After the four-week program has been completed, I will meet with Dr. Hairville for 30 minutes once a month to ensure adequate progress is being obtained and to ensure he is not experiencing worsened symptoms with his low back. If he has any additional health concerns, I will encourage him to see his primary physician. If his condition has not been aggravated during his exercise, I will demonstrate some additional exercises he can incorporate in his training routine.