Physical Therapy for Back Pain

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Why would you not want to operate on a herniated disc?

1. Because the herniation is not very large
2. Because the patient has a BMI of 50
3. Because the patient is improving with conservative care
4. The patient has not insurance
1. Because the patient has osteoporosis
2. Because the patient has had pain for 40 years
3. Because the patient smokes cigarettes
4. Because the patient is 95 years old
Disclaimer:

- The presenter has no conflicts of interest to disclose regarding today's presentation.
Case Study Presentation

- Dorothy, 78, spinal stenosis, neurogenic claudication, grade I spondylolisthesis L45, psychosocial.

- Chuck, 54, chronic back>leg pain, multilevel DDD with some stenosis, type II diabetes, used to play football, is quitting smoking, psychosocial.

- Steve, 40, acute disc herniation with radiculopathy, acute nerve pain, mountain biker, medical marijuana, psychosocial.
Dorothy, 78, spinal stenosis, neurogenic claudication, grade I spondylolisthesis L45, psychosocial.

► Subjective Evaluation
  ► Looking at how patient perceives condition, how it is affecting them and their goals.

► Objective Evaluation

► Discussion on findings and setting goals
Dorothy, 78, spinal stenosis, neurogenic claudication, grade I spondylolisthesis L45, psychosocial.

- Probable findings:
  - Flexion alleviation and extension provocation activities
  - Level of deconditioning/fitness/mobility
  - General strength and flexibility
  - Neurogenic claudication
  - Fall risk
  - Patient perception of disability
Dorothy, 78 y/o

- Physical Therapy Treatment Ideas:
  - Patient education on positions of alleviation, activity modification, and adaptive devices
  - Aerobic conditioning
  - Flexibility work
  - Manual therapy
  - Therapeutic exercise
  - Home exercise program
Dorothy, 78 y/o

- Patient education:
  - Planning activities around manageable symptoms.
  - Flexion Postures and positions for comfort.
    - Sleeping
    - Kitchen
  - Adaptive devices.
Dorothy, 78
Aerobic Conditioning
Recumbent
Incline versus Unloaded
Dorothy, 78 y/o
Manual Therapy

- Treatment Options must consider comorbidities and health of patient to make best clinical decision.
- Risk versus Benefit
- Areas that could be benefit to decrease extension stress off the lower Lumbar spine:
  - Anterior hip Flexibility
  - Posterior pelvis rotation
  - Lumbar flexion
  - Thoracic Spine extension
Dorothy, 78
Flexibility Work

Supine Psoas
Modified Thomas
Prone Psoas
Dorothy, 78
Manual Therapy

Mulligan Technique
Standing, Sitting, Quadruped

Muscle Energy

Oblique Facet Gap Stretch
Dorothy, 78 y/o
Therapeutic Exercise (Flexion Bias)

- Posterior Pelvic Rotation Training
  - Quadruped, Sitting, Standing

- Abdominal Facilitation and Training

- Functional Training
Dorothy, 78

Therapeutic Exercise (Flexion Bias)

Quadriped, sit, stand
Upright Postures

Supine to standing
Posterior Pelvic Tilt
Abdominal Muscle Training

Functional Training
Posterior Pelvic Tilt with Function
Dorothy, 78 y/o  
Home Exercise Program

- Flexibility Exercises and Strengthening Exercises
  - Requires patient buy in equaling compliance and consistency.
  - Respect time, perceived challenge, and ease to set up environment
Chuck, 54, chronic back>leg pain, multilevel DDD with some stenosis, type II diabetes, used to play football, is quitting smoking, psychosocial.

- **Subjective Evaluation**
  - Looking at how patient perceives condition, how it is affecting them and their goals.

- **Objective Evaluation**

- **Discussion on findings and setting goals**
Chuck, 54, chronic back>leg pain, multilevel DDD with some stenosis, type II diabetes, used to play football, is quitting smoking, psychosocial.

- Probable findings:
  - Patient perception of disability and motivation
  - Level of Deconditioning/Fitness/Overall Health
  - Provocation/Alleviation positions and activities
Chuck, 54 y/o

- Physical Therapy Treatment Ideas:
  - Patient education on positions of alleviation and adaptive devices
  - Aerobic conditioning
  - Therapeutic Exercise
  - Flexibility Exercises
  - Manual therapy
  - Modalities
  - Home exercise program
Steve, 40, acute disc herniation with radiculopathy, acute nerve pain, mountain biker, medical marijuana, psychosocial.

- **Subjective Evaluation**
  - Looking at how patient perceives condition, how it is affecting them and their goals.

- **Objective Evaluation**

- Discussion on findings and setting goals
Steve, 40, acute disc herniation with radiculopathy, acute nerve pain, mountain biker, medical marijuana, psychosocial.

Possible findings:

- Lack of knowledge about condition
- Fear of current and future impact on lifestyle
- Abnormal Posturing and Gait
- Gross loss of function
- Salient sign of radiculopathy down the leg
Steve, 40 y/o

- Physical Therapy Treatment Ideas:
  - Patient education on positions of alleviation and adaptive devices
  - Modalities
  - Therapeutic Exercise
  - Flexibility Exercises
  - Manual therapy
  - Aerobic conditioning
  - Home exercise program
Steve, 40 y/o
Patient education on positions of alleviation, body mechanics, and adaptive devices

- Positions
  - Supine hook-ly
  - Reclined
  - Self unloading of Lumbar Spine
  - Progressive extension positioning and PROM
  - Avoid prolonged sitting, BLT, prolonged stand and walking

- Body Mechanics

- Adaptive devices
Steve, 40 y/o
Modalities (Acute)

- Ice versus Heat
- Ultrasound
- Electrical Stimulation
Steve, 40 y/o
Manual Therapy

- Acute Stage
  - Soft Tissue Mobilization
  - Gentle traction

- Subacute Stage

- Chronic Stage
Steve, 40 y/o

Exercise

- Progressive exercises based on recovery and position of tolerance.
  - List correction and return to neutral posture
  - Unloaded Lumbar exercises
  - Progressive weight bearing
  - Functional exercises
Steve, 40 y/o

List Correction and Neutral Posture

Standing

Standing with Unloading
Steve, 40 y/o
Unloaded exercise

Supine
Traction
Reduced Gravity
Steve, 40 y/o
Progressive Weight Bearing

Aerobic Conditioning

Sitting

Standing
Steve, 40/y/o

Functional Exercise

- Back to Work Functional Exercise
- Return to Recreational Activities
- Increasing load and/or speed with movement
Steve, 40 y/o
Functional Training

Squats with Load

Torsion Exercise

Unstable Surface
Steve, 40 y/o
Functional Training

- Stability with Bike
- Unstable Surface
- Movement Control
Steve, 40 y/o
Home Exercise Program

- Requires patient buy in, compliance, and consistency.

- Respect time, perceived challenge, and ease to set up environment.
Summary of PT involving the three cases presented

- Treatment progression based on functional improvement without provocation of symptoms.

- Active approach, except in acute conditions.

- Patient being an active willing participant seeing value.
Thank you to all my mentors over my career for their sharing of knowledge.