

a Treatment Response Criteria

Good:

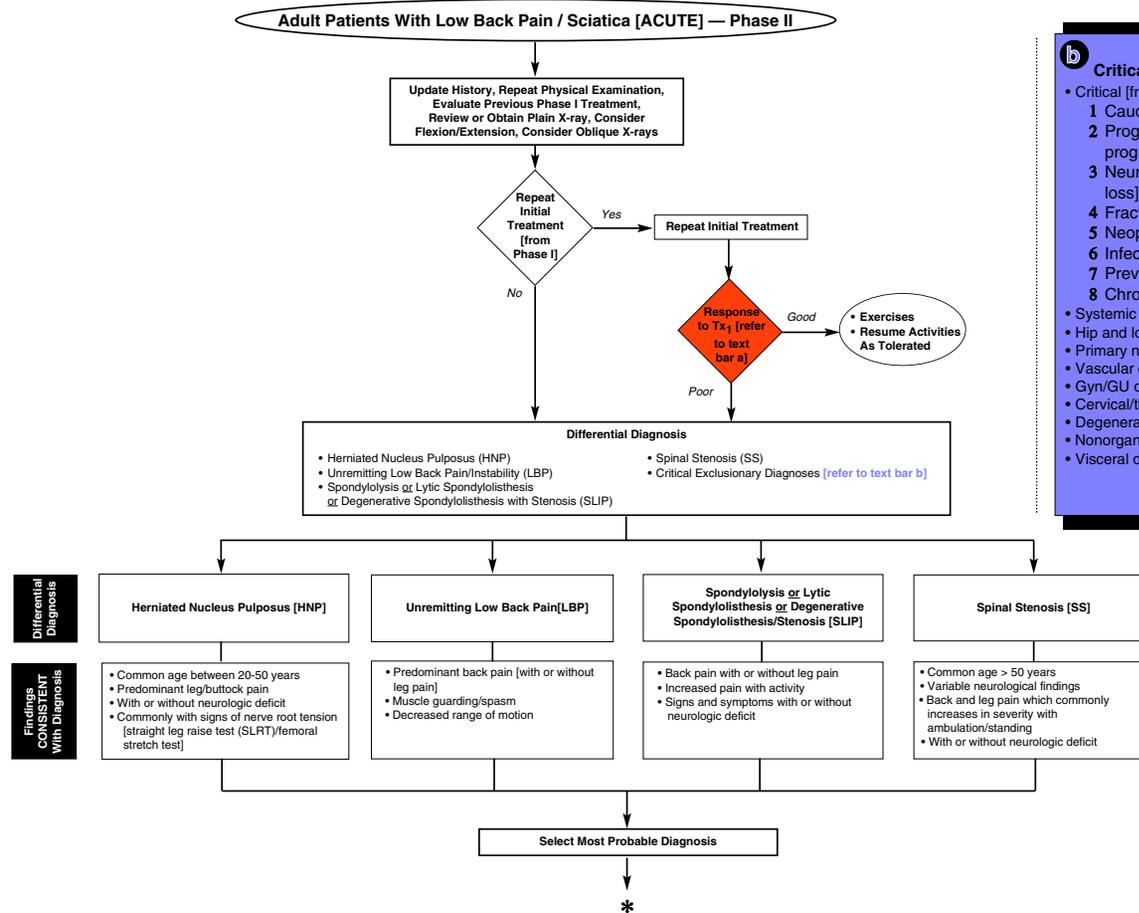
- Patient satisfied with outcome
- Patient function improved

Poor or Partial:

- Patient dissatisfied with outcome
- Patient function unimproved or worsened
- Persistent sequelae or complications

b Critical Exclusionary Diagnoses For Phase II

- Critical [from Phase I]
 - 1 Cauda Equina Syndrome [CES]
 - 2 Progressive neurologic changes and/or severe progressive symptomatology
 - 3 Neurologic deficit [muscle weakness and/or reflex loss]
 - 4 Fracture
 - 5 Neoplasm
 - 6 Infection
 - 7 Previous spinal surgery with persistent pain
 - 8 Chronic pain syndrome
- Exercises
- Resume Activities As Tolerated
- Systemic Arthropathies
- Hip and lower extremity disorder
- Primary neurologic disorder
- Vascular disorders
- Gyn/GU disorders
- Cervical/thoracic pathology
- Degenerative Scoliosis
- Nonorganic pain syndromes
- Visceral disorders



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c **Confirmatory Studies—HNP**

MRI:

- Highest diagnostic sensitivity and specificity
- No radiation exposure

C/T and C/T Myelography:

- Radiation exposure
- Myelography associated spinal headache risk

Electrodiagnostic Studies (EDS):

- Differentiate peripheral neuropathies
- Determine degree of neurologic loss
- Determine spinal nerve root level
- Corroborate physical examination findings

g **HNP Non-Operative Treatment Phases**

Treatment Phases:

I. Pain Control — Consider one or more of the following:

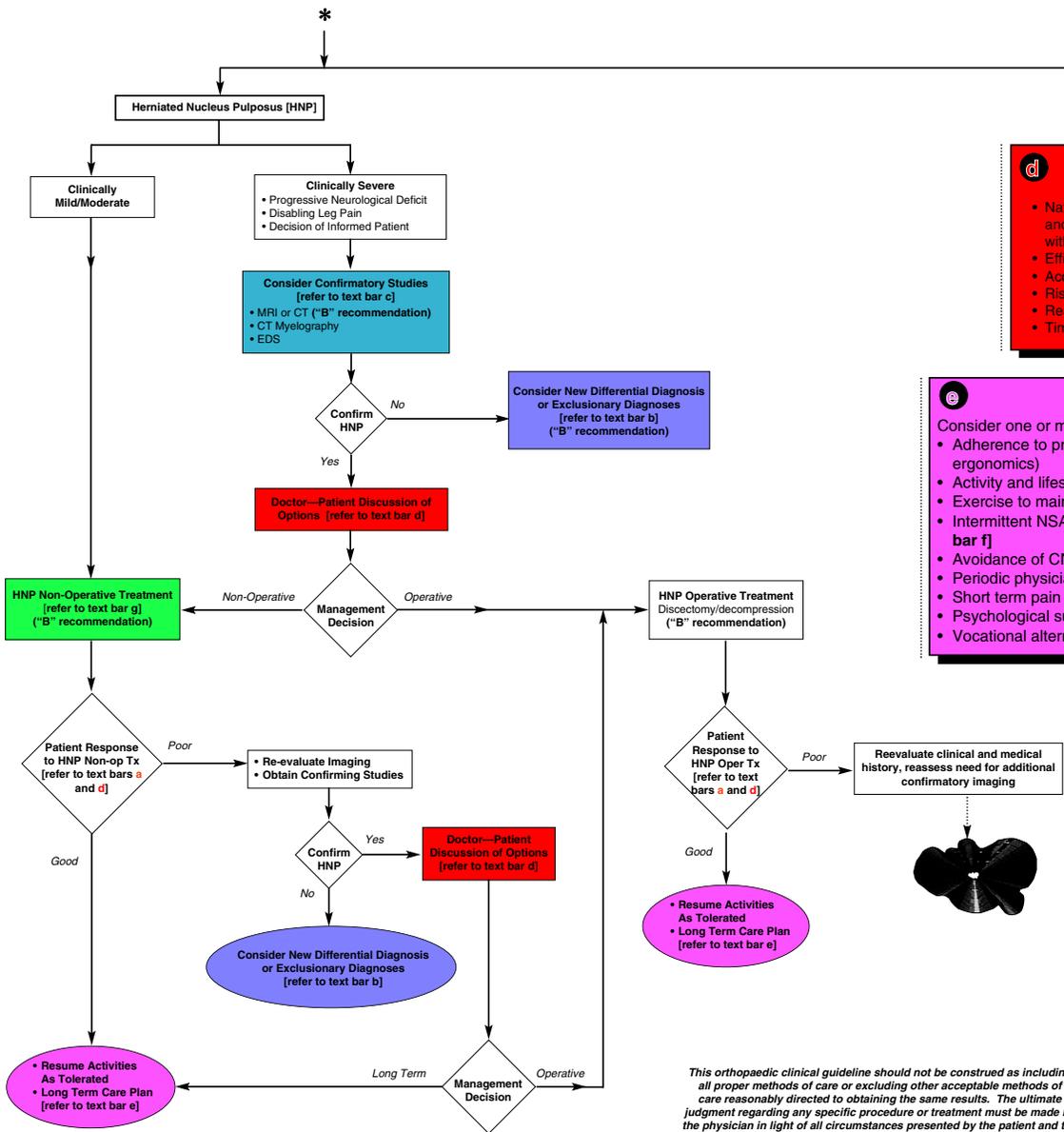
- back first aid
- trial of exercises
- NSAIDs [refer to text box f this page]
- analgesics
- corticosteroids

- 1 oral
- 2 epidural (requires preinjection MRI or Myelogram/CT)

II. Exercise Training — Consider one or more of the following:

- soft tissue flexibility
- joint mobility
- stabilization program
- abdominal program
- gym program
- aerobic program

("B" recommendation)



d **Doctor—Patient Discussion of Options**

- Natural history of underlying condition including: short and long term pain and physical impairment expectations with and without treatment
- Efficacy of various treatment options
- Accuracy and options in diagnostic testing
- Risks and complications of treatment options
- Reasonable expectations of treatment options
- Time frame to accomplish expected outcome

e **Long Term Care Plan**

Consider one or more of the following:

- Adherence to proper back hygiene (mechanics, education, ergonomics)
- Activity and lifestyle modification as necessary
- Exercise to maintain aerobic fitness, trunk strength, and flexibility
- Intermittent NSAID usage with toxicity monitoring [refer to text bar f]
- Avoidance of CNS pain and sedative medications
- Periodic physician follow-up
- Short term pain control therapy for pain flares (when necessary)
- Psychological support as necessary
- Vocational alternatives

f **NSAIDs**

NSAIDs are relatively contraindicated in patients with renal insufficiency or pregnancy. Administer cautiously in individuals with hypertension or gastrointestinal intolerance. Side effects and toxicity should be monitored during administration.

There is no evidence that administration of NSAIDs are more efficacious than simple analgesics or acetaminophen in relieving symptoms in non-inflammatory conditions.



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Unremitting Low Back Pain [LBP]

Consider MRI

Exclusionary Diagnoses



Doctor—Patient Discussion of Options [refer to text bar d]

Management Decision

LBP Non-Operative Treatment [refer to text bar h]



Additional Diagnostic Tests
• Attempt to identify pain generators [refer to text bar i]
• Consider psychological evaluation

Doctor—Patient Discussion of Options [refer to text bar d]

Management Decision

LBP Operative Treatment Fusion [refer to text bar j]

Evaluate Response to LBP Op Tx

Reevaluate clinical and medical history, reassess need for additional confirmatory imaging

• Resume Activities As Tolerated
• Long Term Care Plan [refer to text bar e]

h LBP Non-Operative Treatment

Consider one or more of the following:

- Patient reassurance
- D/C CNS acting analgesic
- Drug detox if necessary
- Active exercise treatment (“B” recommendation)
- Consider psychological treatment (“B” recommendation)
- Consider manual therapy (“C” recommendation)
- Consider 1-3 injection program for acute exacerbation (requires preinjection MRI or Myelogram/CT) (“C” recommendation)
- Consider multi-disciplinary program (“B” recommendation)

i Identify Pain Generators [LBP]

Consider:

- Facet joint diagnostic injection (“B” recommendation)
- Discography (diagnostic disc injection) (“B” recommendation)
- Lumbar selective nerve block (“D” recommendation)
- Electrodiagnostic evaluation (if radicular component) (“B” recommendation)

- 1 electromyography and nerve conduction studies (“B” recommendation)
- 2 somatosensory evoked potential studies (“D” recommendation)

j Fusion

The current data is incomplete to judge the scientific validity of spinal fusion for low back pain syndromes other than spondylolisthesis, certain fractures and tumors, and documented segmental instability. The selected use of fusion for unremitting low back pain other than spondylolisthesis can be considered effective treatment for selected patients. The successful results of fusion for low back pain syndromes appears to be significantly reduced in patients with greater than single disc involvement. (“B” recommendation)

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Spondylolysis or Lytic Spondylolisthesis
or Degenerative Spondylolisthesis/Stenosis [SLIP]

Clinical Evaluation
• Instability
• Neurological Deficit

Further Evaluation

Doctor—Patient Discussion of Options
[refer to text bar d]

SLIP Non-Operative Treatment
[refer to text bar k]
("B" recommendation)

Response to Non-op SLIP Tx
[refer to side text bar a]

Good

Poor

Consider Diagnostic Tests:
• MRI
• CT/Myelogram
• Bone scan
• Discography
• Facet/Lysis Injection
• Psychological Evaluation

Doctor—Patient Discussion of Options
[refer to text bar d]

Operative

Operative Treatment — Consider:
• Decompression
• Fusion
• Instrumentation
("B" recommendation)

Response to SLIP Op Tx
[refer to text bar a]

Good

Poor

Reevaluate clinical and medical history, reassess need for additional confirmatory imaging

Resume Activities As Tolerated
Long Term Care Plan
[refer to text bar e]

Non-operative

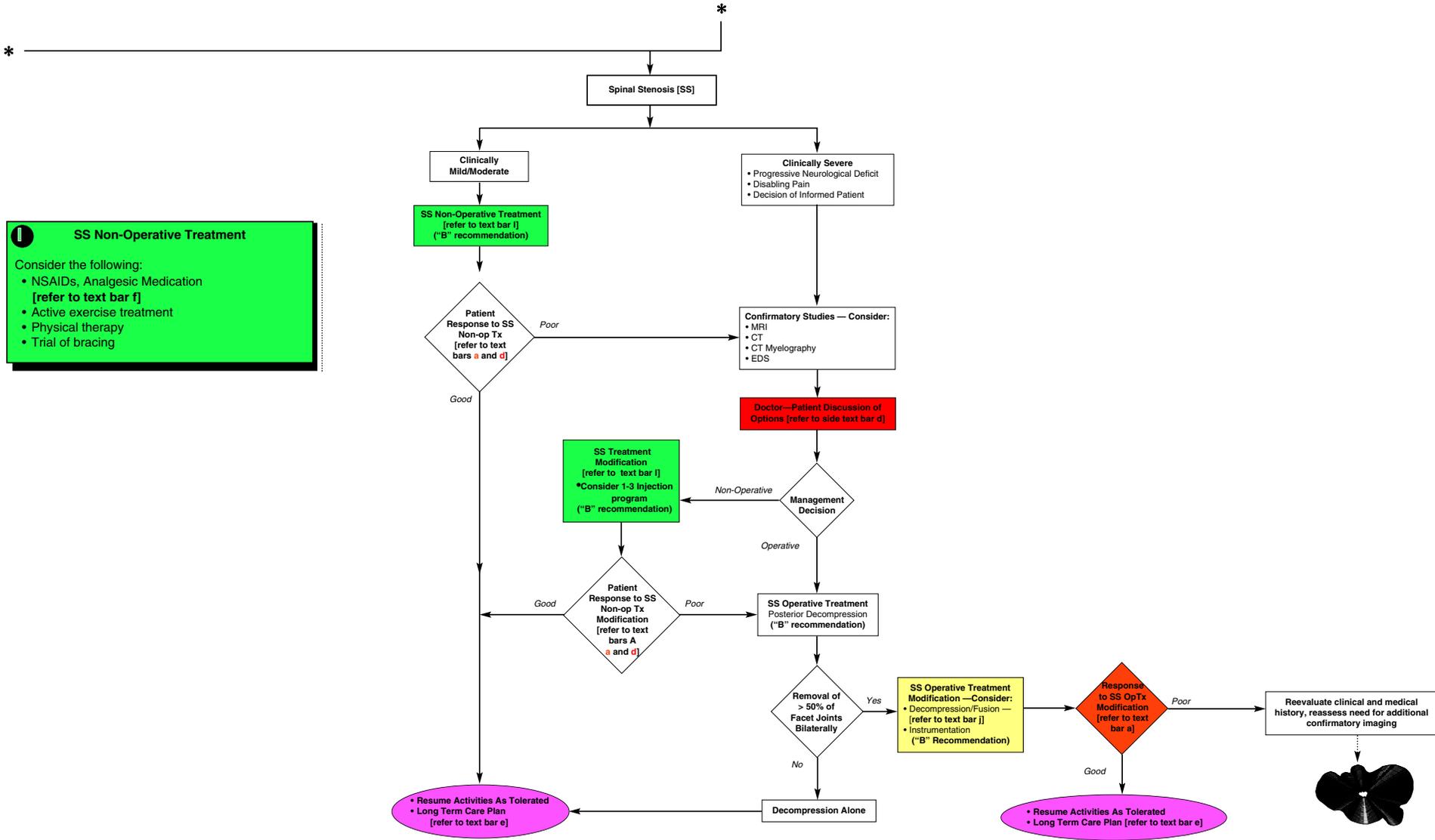
SLIP Non-Operative Treatment

Consider the following:

- NSAIDs, Analgesic Medication [refer to text bar f]
- Active Exercise Treatment
- Physical Therapy
- Trial of Bracing
- 1-3 Injection Program (requires preinjection MRI or Myelogram/CT)

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SS Non-Operative Treatment

Consider the following:

- NSAIDs, Analgesic Medication [refer to text bar f]
- Active exercise treatment
- Physical therapy
- Trial of bracing

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