

Universe Of Adult Patients With Low Back Pain / Sciatica [ACUTE] — Phase I

- Remaining Diagnostic and/or Specific Symptoms**
 Consider diagnoses and symptoms such as:
- Low Back Strain
 - Osteoarthritis [DJD]
 - Herniated Nucleus Pulposus
 - Spinal Stenosis
 - Spondylolisthesis
 - Instability

- Significant History**
- Location of symptoms: % low back or leg
 - Duration: acute (< 6 weeks) or chronic
 - Mechanism of onset: insidious or specific (trauma)
 - Character or description of pain: mechanical, radicular, claudicant, non-specific
 - Neurologic history: distribution, bowel and bladder symptoms, weakness, numbness (saddle)
 - Constitutional (i.e., fever or weight loss)
 - Previous spinal surgery with persistent pain

- Significant Physical Examination**
- Inspection of posture, stance and gait
 - ROM testing of spine, hip and lower extremity
 - Specific tests (straight leg raise and reverse straight leg raise)
 - Neurological (motor strength, muscle wasting, sensation, deep tendon reflexes, specific reflexes such as Babinski and Clonus)
 - Directed medical exam

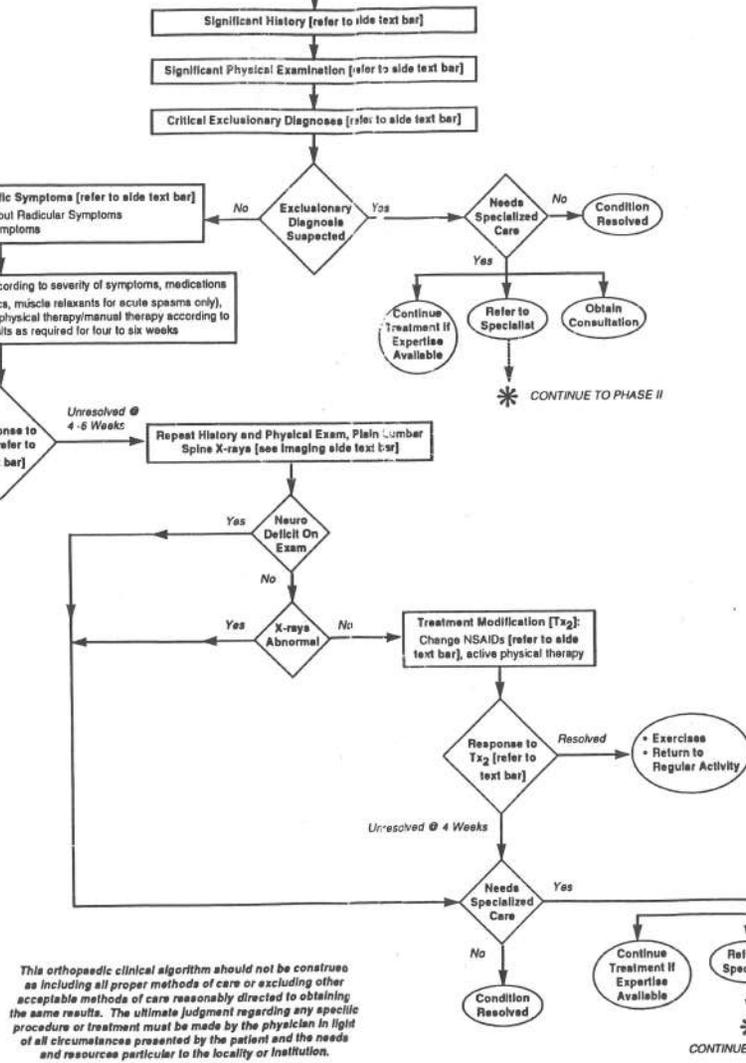
- Critical Exclusionary Diagnoses**
- Cauda Equina Syndrome [CES]
 - ① Acute, severe low back pain
 - ② Saddle anesthesia
 - ③ Profound/progressive neurologic deficit
 - ④ Loss of bowel and bladder control
 - Progressive neurologic changes and/or severe progressive symptomatology
 - Neurologic deficit [muscle weakness and/or reflex loss]
 - Fracture
 - Neoplasm
 - Infection
 - Previous spinal surgery with persistent pain
 - Chronic pain syndrome
 - Extra-spinal conditions (i.e., visceral, vascular, GU)

- 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

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.



This orthopaedic clinical algorithm should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding any specific procedure or treatment must be made by the physician in light of all circumstances presented by the patient and the needs and resources particular to the locality or institution.

- Imaging**
- AP lateral
 - Spot lateral

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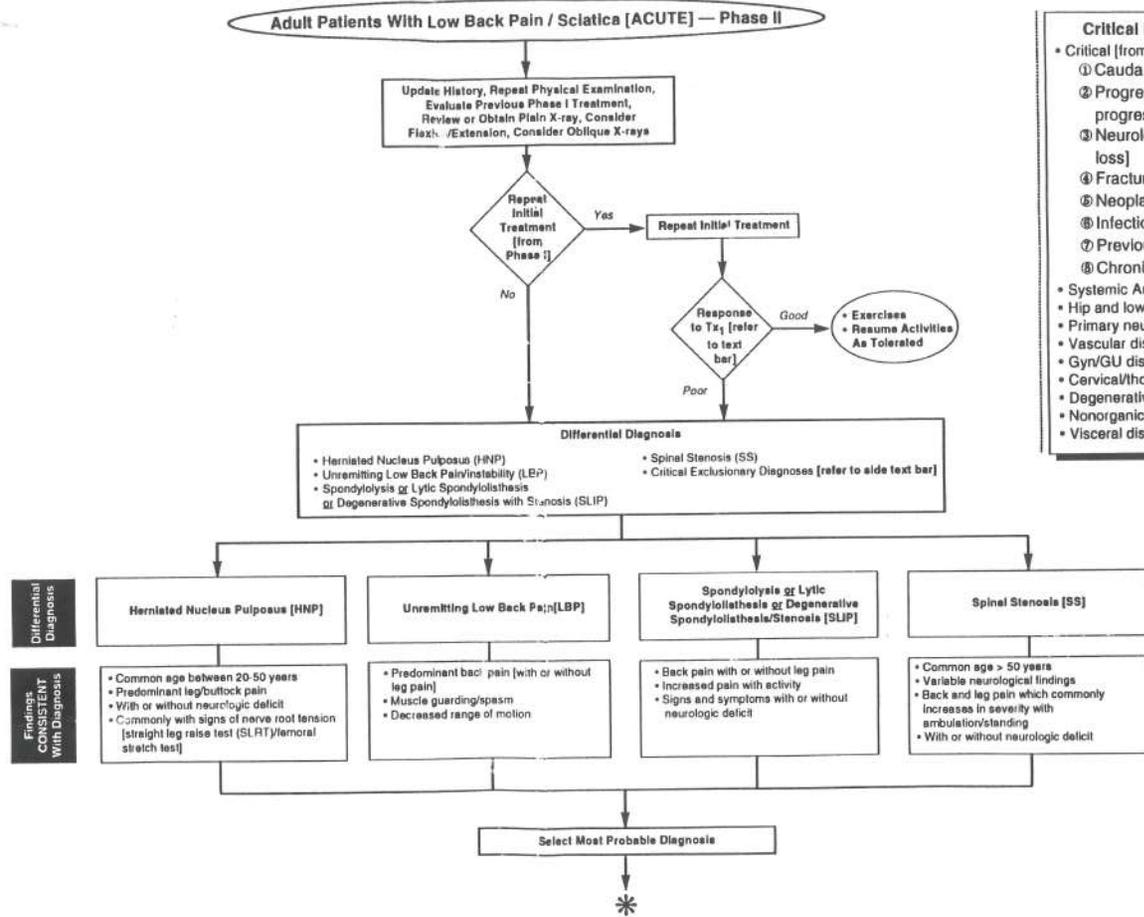
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- Critical Exclusionary Diagnoses For Phase II**
- Critical [from Phase I]
 - ① Cauda Equina Syndrome [CES]
 - ② Progressive neurologic changes and/or severe progressive symptomatology
 - ③ Neurologic deficit [muscle weakness and/or reflex loss]
 - ④ Fracture
 - ⑤ Neoplasm
 - ⑥ Infection
 - ⑦ Previous spinal surgery with persistent pain
 - ⑧ Chronic pain syndrome
 - 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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A Confirmatory Studies—HNP

MRI:

- Highest diagnostic sensitivity and specificity
- No radiation exposure

CT and CT 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

B Non-Operative Treatment Phases [HNP]

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
 - ◊ oral
 - ◊ epidural

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

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

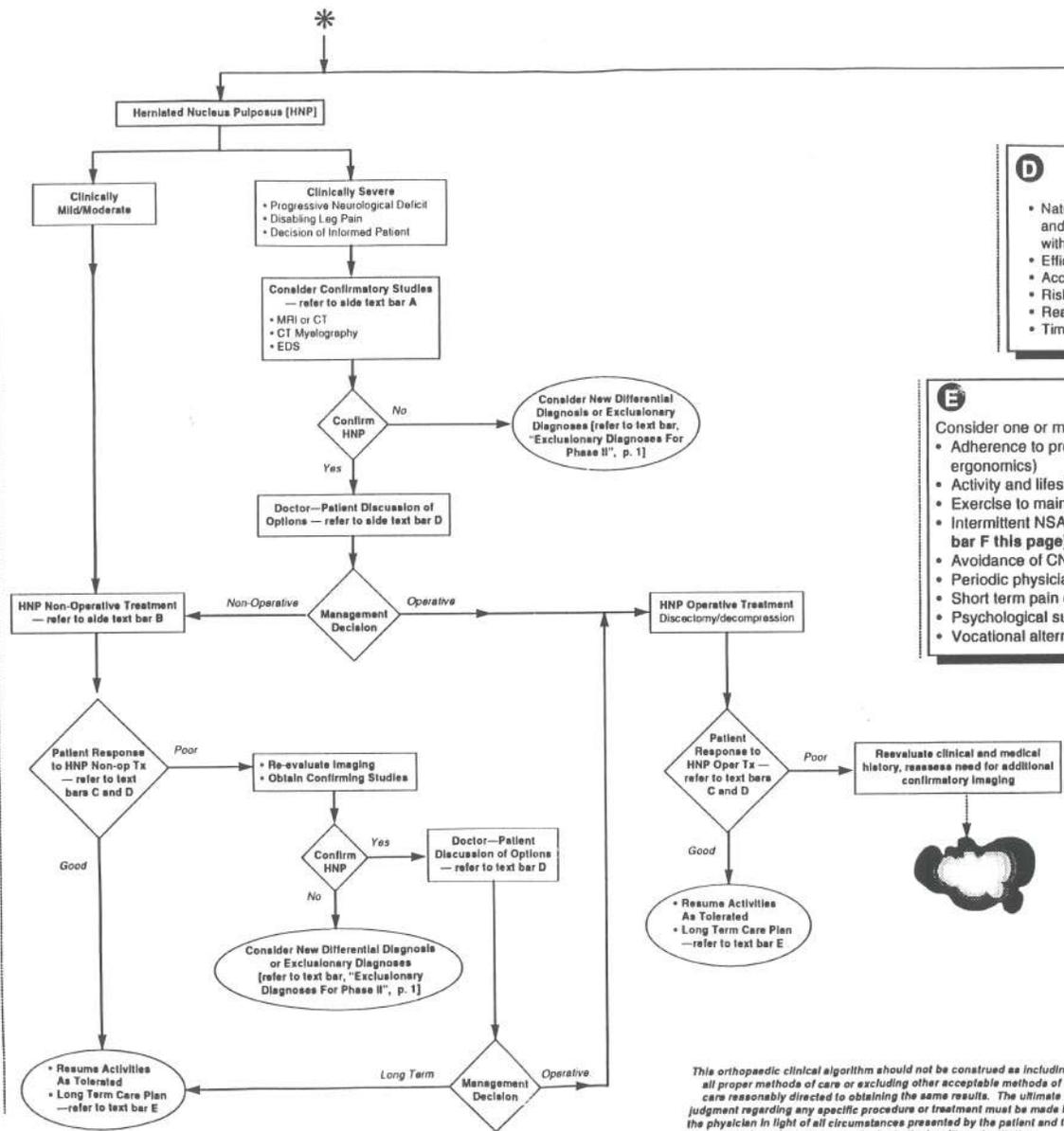
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D Doctor—Patient Discussion of Options

- 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 this page]
- 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

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B 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
- Consider psychological treatment
- Consider manual therapy
- Consider 1-3 Injection program
- Consider multi-disciplinary program

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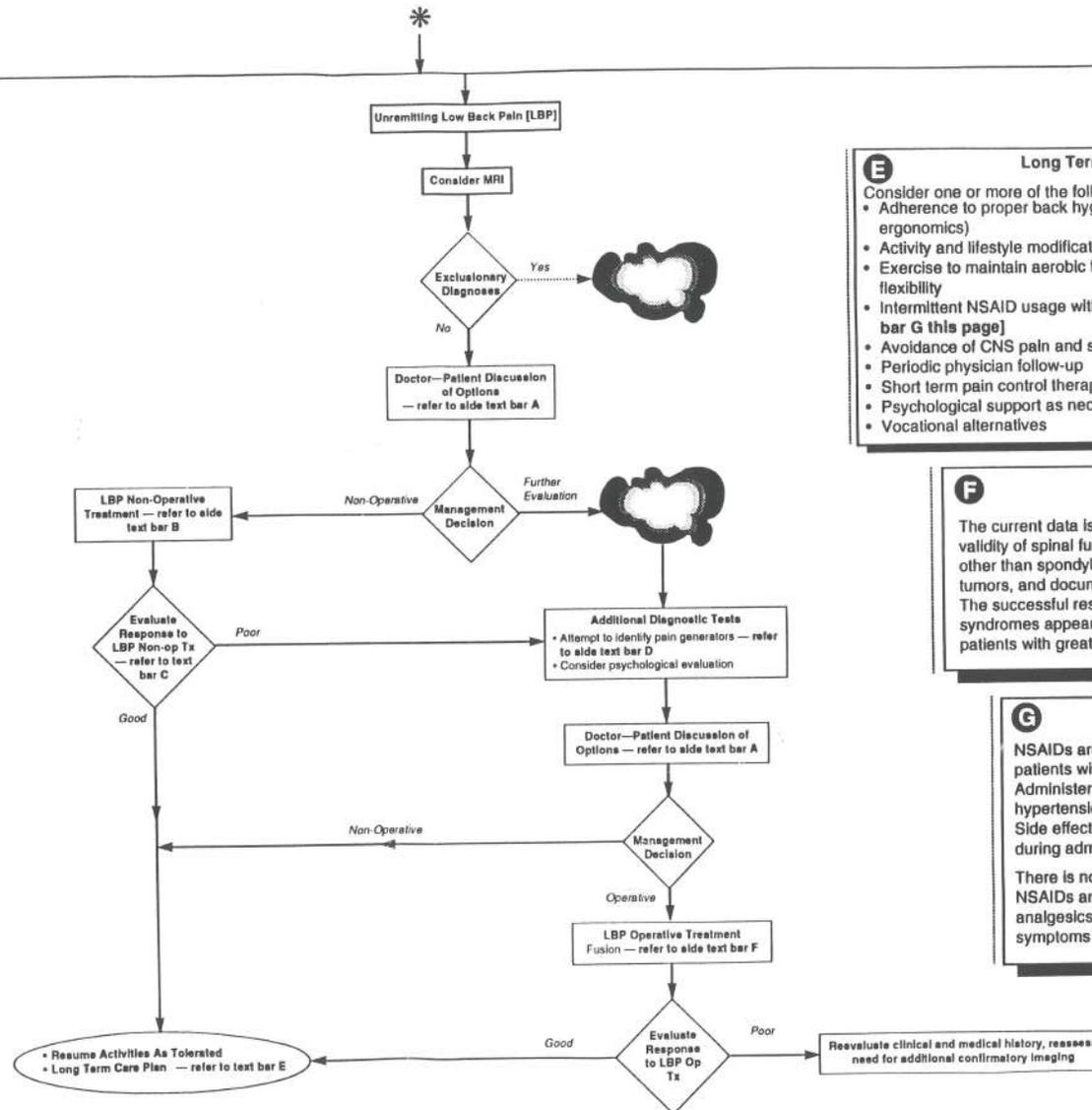
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D Identify Pain Generators [LBP]

Consider:

- Facet joint diagnostic injection
- Discography (diagnostic disc injection)
- Lumbosacral selective nerve block
- Electrodiagnostic evaluation (if radicular component)
 - ① electromyography and nerve conduction studies
 - ② somatosensory evoked potential studies



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F 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 successful results of fusion for low back pain syndromes appears to be significantly reduced in patients with greater than single disc involvement.

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A SLIP Non-Operative Treatment

Consider the following:

- NSAIDs, Analgesic Medication [refer to text bar E this page]
- Active Exercise Treatment
- Physical Therapy
- Trial of Bracing
- 1-3 Injection Program

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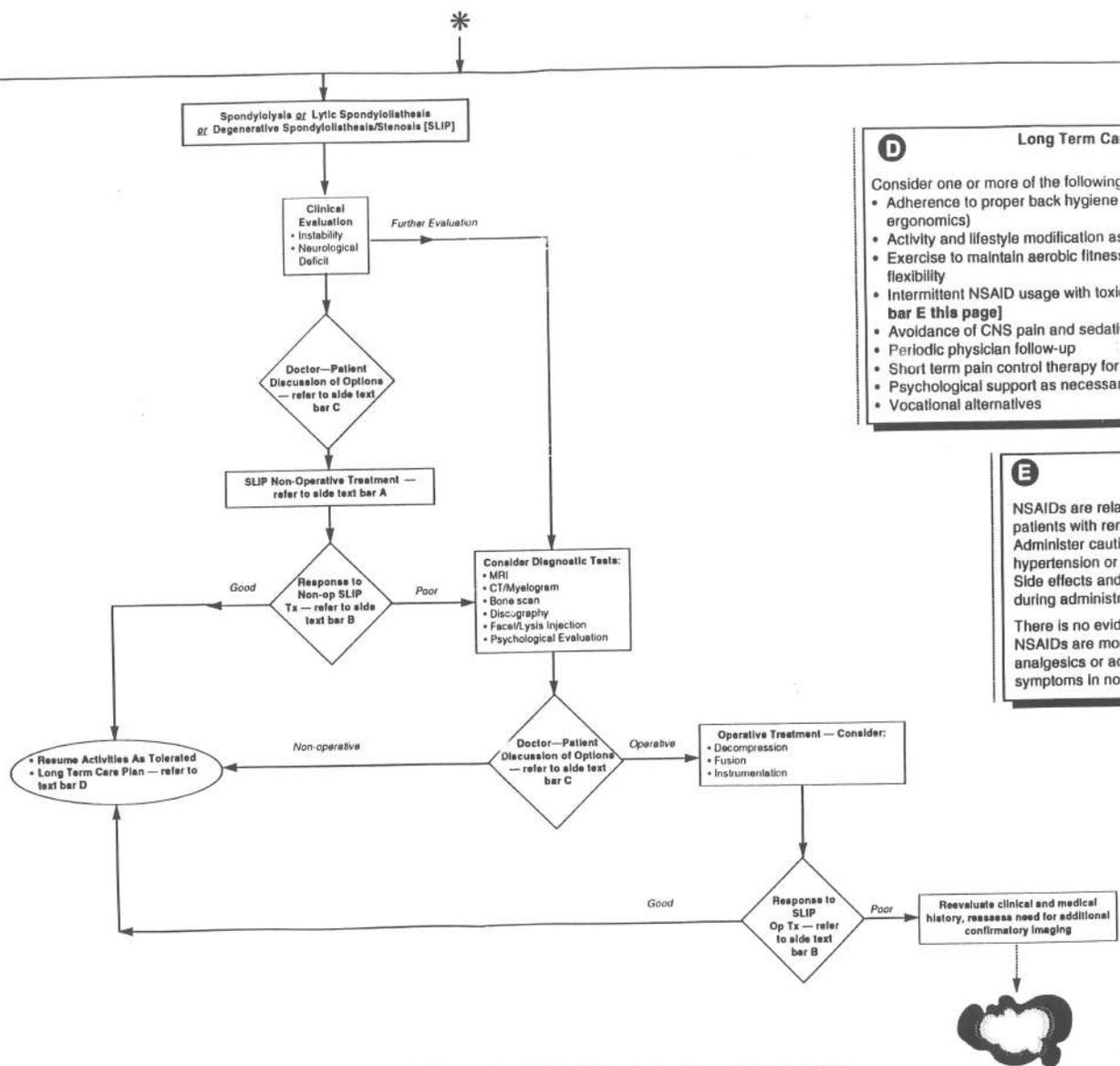
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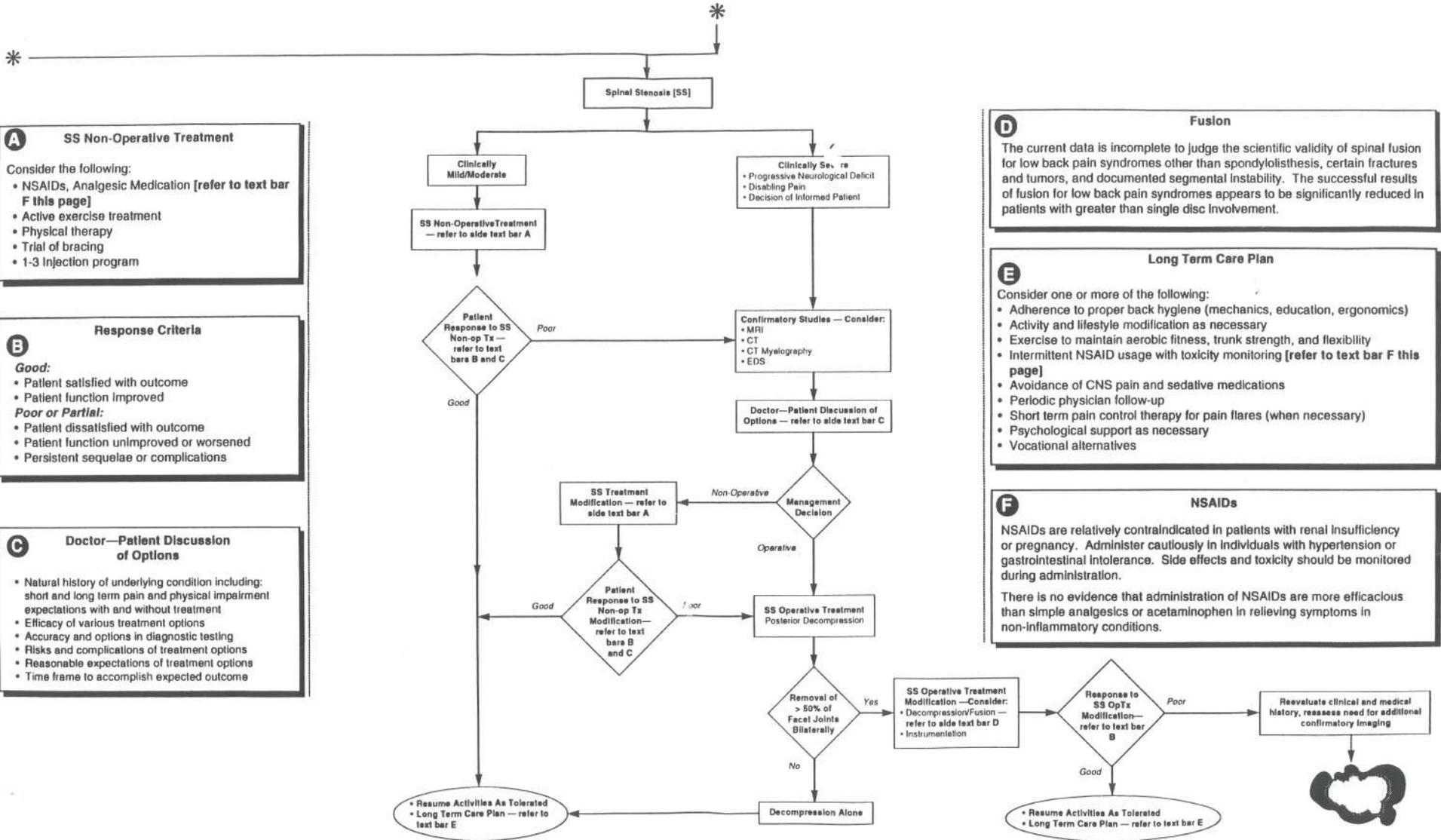
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A SS Non-Operative Treatment

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