An Algorithm for the Management of Low Back Pain

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Low Back Pain

80% of Patients

No

Objective Etiology
Differential Diagnosis

- HNP
- Unremitting LBP/Instability
- Lysis, Listhesis
- Spinal Stenosis
- Non Specific LBP (strain/sprain)
GOALS

- Prompt Return to Function
- Low Cost to Society
- Minimize Ineffectual Surgery
- Surgery at Optimal Time
Corset successful

Exercise successful

ASA rest 6 weeks successful

Normal life pattern
COOL IT!

back pain is a waiting game!
<table>
<thead>
<tr>
<th>TIME</th>
<th>IMPROVEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 week</td>
<td>60%</td>
</tr>
<tr>
<td>3 weeks</td>
<td>70%</td>
</tr>
<tr>
<td>6 weeks</td>
<td>90%</td>
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</tbody>
</table>
BED REST

Weisel, S.W., Spine 5:1980
Drug Rx

Salicylates
NSAIDS
Acetaminophen
Oral Steroids
Muscle Relaxants
Anti-Depressants
Injections
  Trigger Point
  Facets
  ESI
Non-Operative Rx

Traction
Manipulation
Counter Irritation
Physical Therapy
Ortho/Postural Devices
Etc
Sharlene Powell and company show that having fun and getting firm is all part...
BETA ENDORPHIN

100% INCREASE WITH LONG DISTANCE RUN.

APPENZELLER, 1981
ASA rest 6 weeks successful

No -> Sciatica predominant

No -> LBP predominant
MRI

CT
Normal life pattern

Surgery successful

Salvage protocol
Discectomy

Open (micro)

Percutaneous

95% Success (non WMC)

(nucleotome)???

(Laser)???
Stenosis
(Stable Spine)

Laminectomy
85%
Stenosis
  + Spondylolistis
  + Scoliosis

Laminectomy 70%
  +
Fusion 85-90%
Timing of Surgery (for HNP)

< 3-6 Months
(better)

> 1 Year
(worse)
HNP → SCIATICA
% IMPROVEMENT

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>4</th>
<th>10</th>
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<tbody>
<tr>
<td>Nonsurg</td>
<td>60</td>
<td>85</td>
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<tr>
<td>Surgery</td>
<td>92</td>
<td>90</td>
<td>No Difference</td>
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</table>

Weber, H.J., Oslo City Hospital 28:1978
Spine 8:1983
ALL 3 OK!
ONLY 2
BEWARE!
LBP predominant

Bone scan med. eval. positive

No

Low back school
Normal life pattern

Yes

Low back school successful

No

Psychosocial evaluation positive
PSYCHO - SOCIAL FACTORS
"...most of the world's work is done by people who do not feel well."

Winston Churchill
87% of depressed patients report pain as a prominent symptom
PERCODAN® Tablets
50 mg oxycodone HCl (WARNING: May be habit forming), 0.38 mg oxycodone terephthalate (WARNING: May be habit forming), 325 mg aspirin/tablet

PERCODAN®-Demi Tablets
25 mg oxycodone HCl (WARNING: May be habit forming), 0.19 mg oxycodone terephthalate (WARNING: May be habit forming), 325 mg aspirin/tablet

†Valium® (diazepam)

PERCO CET®-5 Tablets
[5 mg oxycodone HCl (WARNING: May be habit forming) and 325 mg acetaminophen (APAP)/tablet]
COMPENSATION INJURIES
### Pending Litigation

#### Negative Effects

<table>
<thead>
<tr>
<th>Author</th>
<th>Journal</th>
<th>Year</th>
</tr>
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<tbody>
<tr>
<td>Campbell</td>
<td>N.Y. St. J. Med</td>
<td>1947</td>
</tr>
<tr>
<td>Krusen</td>
<td>JAMA</td>
<td>1958</td>
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<td>Reynolds</td>
<td>JBJS</td>
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<td>Fager</td>
<td>Spine</td>
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<td>Herron</td>
<td>C.O.R.R.</td>
<td>1985</td>
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<td>Out of Work</td>
<td>Chance to RTW</td>
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<tr>
<td>6 Months</td>
<td>50%</td>
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<tr>
<td>1 Year</td>
<td>25%</td>
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<tr>
<td>1½-2 Years</td>
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Normal life pattern

D/C narc. antidepress., psych. Rx. successful

Failure D/C therapy reeval.
Normal life pattern \rightarrow \text{Yes} \rightarrow \text{Spinal fusion successful} \rightarrow \text{No} \rightarrow \text{Salvage protocol}
Fusion

Outcome Data

???
Pain Generators

- Facet joint diagnostic injection(s)
- Discography
- Lumbosacral selective nerve root block(s)
- Electrodiagnostic evaluation
  - Radicular Component
    - EMG/NCS
    - SSEP
LBP

P-L Fusion 70% (??)
Interbody 80% (??)
Artificial Disc
Surgical Failures

- Back pain < Leg pain
- Paucity of objective data
- Depression
- Litigation, compensation
TAKE 2 TABLETS
CALL ME IN THE MORNING