

## Study of the Cervical Syndrome

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THESE AUTHORS NOTE:

“Cervical Syndrome” is defined as “soft tissue lesions of the cervical spine, either degenerative or traumatic in origin.”

These authors studied 386 consecutive patients with “Cervical Syndrome” documenting their treatment outcomes. The age range was 19-61 years with the average age being 42 years. Twenty-five percent (25%) were involved in litigation.

These authors imply that the usual site for the patient’s pain was the intervertebral disc, as follows:

- #1 C5-6 disc 56% of the time
- #2 C4-5 disc
- #3 C6-7 disc

These authors imply that disc degeneration in the mid cervical spine is usually trauma induced; disc degeneration in the lower cervical spine is often associated with the aging process.

Conservative treatment ranged from 1 – 16 weeks with an average of 13 weeks, with the following outcomes:

- 29% complete pain relief
- 49% improvement
- 22% poor results

When the authors looked only at the group with pending litigation, the were:

- 25% complete pain relief
- 52% improved
- 23% poor results

Because outcomes were essentially identical in the litigation group compared to the non-litigation group, the authors concluded that litigation did not play a role in the effectiveness of treatment.

The authors recommend that patient evaluation include:

- 1) Dermatomes
- 2) Myotomes, especially C5 (deltoid), C6 (biceps) and C7 (triceps)
- 3) Roentgenograms of the cervical spine, including lateral, maximum flexion, maximum extension, and obliques

X-ray findings included:

84%	straightening or reversal of cervical lordosis
72%	thinning of one or more discs
72%	posterior osteophytes
60%	anterior hypermobility on flexion x-rays
60%	anterior osteophytes
24%	posterior hypomobility on extension x-rays

The authors noted that these types of findings are often found in asymptomatic patients. "However, in the presence of a cervical syndrome, these alterations are of major importance in the localization of the segment or segments responsible for the clinical disorder."

The authors found "a very interesting combination of a hypermobile vertebra in the anterior direction proximal to a fixed segment."

These authors suggest that patients suffering with cervical syndrome be treated conservatively for 6 months as a fair trial." In patients with significant symptoms after 6 months of conservative treatment, surgical intervention should be considered.

The authors suggest that the following patients should consider surgical intervention prior to 6 months of conservative treatment:

- 1) Intense, severe, relentless symptoms
- 2) Repeated recurrences of symptoms following times of complete or diminished relief of symptoms
- 3) Advanced degenerative changes associated with motor and/or sensory deficits
- 4) Progressive atrophy of the intrinsic muscles of the hands
- 5) Persistent sensory disturbances
- 6) Persistent extremity weakness
- 7) Evidence of sympathetic irritation:

The authors note that sympathetic irritation symptoms can be so "bizarre" that they are often considered to be psychogenic; yet "dramatic results have been attained by fusion of the affected cervical segments."

- 8) Rapid degeneration of a cervical disc:

Following trauma, a cervical disc may rapidly degenerate within a few months, including in patients under 20 years of age. These patients are "resistant to any form of conservative therapy."

In patients who did not achieve acceptable clinical outcomes with conservative treatment and proceeded to surgery, the authors claim that anterior cervical fusion is superior to posterior cervical fusions. Anterior fusions in such cases resulted in the following outcomes:

74%	excellent outcomes
15%	improved
11%	poor

## KEY POINTS FROM DAN MURPHY

- 1) In this study, conservative treatment was not defined. It is probable that it consisted primarily of drugs, and maybe some physical therapy.
- 2) "Cervical Syndrome" is defined as "soft tissue lesions of the cervical spine, either degenerative or traumatic in origin."
- 3) These authors imply that the usual site for the patient's pain was the intervertebral disc, as follows:
  - #1 C5-6 disc 56% of the time
  - #2 C4-5 disc
  - #3 C6-7 disc
- 4) These authors imply that disc degeneration in the mid cervical spine is usually trauma induced; disc degeneration in the lower cervical spine is often associated with the aging process.
- 5) The time for these patients with "cervical syndrome" to reach maximum improvement was 13 weeks.
- 6) 22-23% of patients with "cervical syndrome" will not respond to conservative treatment [probably drugs/physiotherapy] and may be candidates for disc surgery.
- 7) Litigation does not influence the outcome of patients suffering from "cervical syndrome."
- 8) The evaluation of patients with "cervical syndrome" should include:
  - 1) Dermatomes
  - 2) Myotomes, especially C5 (deltoid), C6 (biceps) and C7 (triceps)
  - 3) Roentgenograms of the cervical spine, including lateral, maximum flexion, maximum extension, and obliques
- 9) X-ray findings for those with "cervical syndrome" include:
 

84%	straightening or reversal of cervical lordosis
72%	thinning of one or more discs
72%	posterior osteophytes
60%	anterior hypermobility on flexion x-rays
60%	anterior osteophytes
24%	posterior hypomobility on extension x-rays
- 10) Pre-accident degenerative and/or biomechanical problems are the areas most likely injured.

- 11) The segment above a hypomobile segment is often hypermobile.  
**[Chiropractors typically adjust the hypomobile segment, reducing the motion stress load of the adjacent hypermobile segment]**
- 12) Patients suffering with "cervical syndrome" should be treated conservatively for 6 months before a surgical intervention is considered.
- 13) The authors suggest that the following patients should consider surgical intervention prior to 6 months of conservative treatment:
- A)) Intense, severe, relentless symptoms
  - B)) Repeated recurrences of symptoms following times of complete or diminished relief of symptoms
  - C)) Advanced degenerative changes associated with motor and/or sensory deficits
  - D)) Progressive atrophy of the intrinsic muscles of the hands
  - E)) Persistent sensory disturbances
  - F)) Persistent extremity weakness
  - G)) Evidence of sympathetic irritation:  
The authors note that sympathetic irritation symptoms can be so "bizarre" that they are often considered to be psychogenic; yet "dramatic results have been attained by fusion of the affected cervical segments."
  - H)) Rapid degeneration of a cervical disc:  
Following trauma, a cervical disc may rapidly degenerate within a few months, including in patients under 20 years of age. These patients are "resistant to any form of conservative therapy."