Soft Tissue Healing

A Review of the Literature
Do All Soft Tissue Injuries Heal Within 6-8 Weeks?

A Review of the Scientific Literature
"We should stop characterizing low back pain in terms of a multiplicity of acute problems, most of which get better, and a small number of chronic long term problems. Low back pain should be viewed as a chronic problem with an untidy pattern of grumbling symptoms and periods of relative freedom from pain and disability interspersed with acute episodes, exacerbations, and recurrences."
The major premise used in the managed care system for the primary care of LBP is based upon the assumption that 90% of patients improve in 6-12 weeks. However, a natural history study by Von Korff found that approximately 60% will recur. In a study of BP in primary care, Von Korff and Saunders found that 60% to 75% improve within the first month, 33% report intermittent or persistent pain at one year, and 20% of patients describe substantial limitations at one year.
“These figures do not fit with the claim that 90% of episodes of LBP end in complete recovery.”
Review of a study in which 373 patients less than 40 years old, with their first onset of back pain, are followed for 10 years. 89% had recurrences and only 33% had no lost time form work from future back problems. Strategies to manage low back pain must be long term and preventive. [Emphasis added.]
Traditional teaching is that 90% of LBP attacks recover within six weeks, but recent natural history studies suggest that this is overly optimistic and over-emphasizes RTW. It now seems that 50% of attacks settle within 4 weeks, but 15-20% have some symptoms for at least 1 year. 70% of patients who have acute back pain will suffer 3 or more recurrences. 20% will continue to have some back symptoms over long periods of their lives.
At 3 months, only approximately 27% were completely better, 28% improved, 30% had no change, and 14% were worse or much worse. It may well be that in the many studies of acute low back pain, there has been very carefully selected clinical material so that only those patients with acute pain of recent onset and no other confounding factors were included, with the result that these studies do not reflect what actually happens in practice.
Bed Rest: should die as soon as it can.

Physical Therapy: There is no adequate evidence of effectiveness.

Spinal manipulation: one of two treatments of proven value.

Early active exercise: Is the other treatment supported by good evidence.

Relief of pain and restoration of function must occur at the same time. Failure to restore function means any pain relief will be temporary and reinforces chronic pain. In the management of occupational back pain, the chiropractic profession is leading the way. The problem is weakness and loss of function, not disease.
...compared the efficacy of five weeks of: (1) spinal manipulation (SM) with trunk strengthening exercises (TSE); (2) SM combined with trunk stretching exercises; and (3) NSAIDs with TSE all followed by 6 weeks of supervised exercise alone.

**For the management of chronic low back pain, trunk exercise in combination with spinal manipulation** or NSAIDs seems beneficial and worthwhile.
Weisel, MD. Backletter 1996; 11(7): 84 Back pain is a recurrent illness.

Carey’s study emphasizes that BP is typically recurrent and sometimes disabling – in a substantial minority.
97% of BP seen by primary care physicians is mechanical in origin. There is something wrong with the muscles, ligaments, or connective tissues.
The pathology model cannot explain back pain or disability. It is not possible to look at pathology and determine the symptoms a patient may be suffering. It also is not possible to look at a patient with back pain with no neurologic deficits and determine the nature of the pathology. About 30% of asymptomatic subjects show abnormalities in the lumbar spine by myelogram, CT and MRI. There is a large percent of symptomatic patients with severe complaints in whom testing fails to reveal any structural lesion.

- 98 people: only 36% had a normal disc at all levels.
- 52% bulge at least one level
- 27% protrusion
- 1% extrusion
- 38% had abnormality at more than one level

Summary: Finding may be frequently coincidental
80% of patients have no identifiable structural pathology and require treatment based on evaluation of functional deficits.

Overemphasis on treatment of structural pathology results in a failure to identify or focus on functional losses and work demands. [Emphasis added.]
Low-back pain is aptly redefined as "a chronic problem with an untidy pattern of grumbling symptoms," with only 25% of patients consulting about the problem reporting full recovery 12 months later. Instead, most patients appear to be enduring their pain but not telling their primary care physician about it.

In fact, after seeing the results, the authors made the following statement:

"By three months after the index consultation with their general practitioner, only a minority of patients with low back pain had recovered. However, most patients with low-back, pain did not return to their doctor about their pain within three months of their initial consultation, and only 8% continued to consult for more than three months."
The authors found that consulting a doctor is not a direct measure of the presence of pain and disability. While patients may stop consulting their doctor, the vast majority will still have some pain and disability 12 months later. Therefore, the authors concluded:
"We should stop characterizing low back pain in terms of a multiplicity of acute problems, most of which get better, and a small number of chronic long term problems. Low back pain should be viewed as a chronic problem with an untidy pattern of grumbling symptoms and periods of relative freedom from pain and disability interspersed with acute episodes, exacerbations, and recurrences. This takes account of two consistent observations about low back pain: firstly, a previous episode of low back pain is the strongest risk factor for a new episode, and secondly, by the age of 30 years almost half the population will have experience a substantive episode of low back pain. These figures simply do not fit with claims that 90% of episodes of low back pain end in complete recovery."
“Follow-up roentgenograms taken an average of 7 years after injury in one series of patients without prior roentgenographic evidence of disc disease indicated that 39% had developed degenerative disc disease at one or more disc levels since injury. It was pointed out that available evidence indicated an expected incidence of 6% degenerative change in a population with this mean age of 30 years. Thus, it appeared that the injury had started the slow process of disc degeneration.”

“In another follow-up study of patients with similar injuries but with preexisting degenerative changes in the neck it was observed that after an average of 7 years 39% had residual symptoms, and roentgenographic evidence of new degenerative change at another level occurred in 55%.”
Symptoms vs. Function

As a result of these and other studies there has been a shift in thinking away from the traditional "symptom" approach, towards contemporary thinking of "function".

For many patients with recurrent back pain, staying functional is a "process" more so than a "result" based on a predictable healing time or average.
Summary

- Since 1956…dozens of studies
- “Natural Healing Time”……Myth
- Mechanical Back Pain…predominant issue
- Restoration and maintenance of “function” is critical
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