

Benefits of Early Intervention of Physical Therapy with Acute Low Back Pain

A literature review of three professional articles demonstrated the benefit of early intervention of physical therapy. One study concluded that implementation of physical therapy within one month of back injury was associated with the ability to return to work within 60 days of the injury. Patients that were referred to physical therapy after lengthy absences from work were shown to require longer episodes of physical therapy care.

Another study investigated early therapy intervention and its effect on treatment outcomes. The treatment efficacy was measured by number of physician visits, case duration, duration of restricted work, and days away from work. An early intervention group was seen within the first 2 days of injury, a comparison group had delayed treatment for 2 to 7 days, and another comparison group had delayed treatment from 8 to 187 days. Results found significant differences between the early intervention group and the other groups. Physician visits, case duration, and restricted workdays were all less in the early intervention group. Days away from work were found to be significantly longer in the group that delayed treatment the longest.

The last article presents a one-year prospective study looking at identifying patients that are at higher risk for chronicity. The patients were randomly assigned to an early intervention physical therapy group or a non-intervention group. There was another low risk group that did not receive intervention in order to provide a comparison. The conclusion showed statistically fewer incidences of chronic pain disability in a wide range of criteria among the early intervention group. These included work, healthcare utilization, medication use, and self-report of pain level. All subjects studied were less than 8 weeks post injury, full time employees, and fell into high or low risk for chronicity using a survey. The average amount of time since injury among the participants was 3-8 weeks. The findings showed that the early intervention group was more likely to return to work and less likely to be taking narcotic analgesics as well as psychotropic medications. The non-intervention high-risk group displayed significantly more symptoms of chronic pain. Cost comparison was also impressive, the intervention group on average cost \$12,721 per patient per year compared to \$21,843 with inclusion of cost of early intervention included in first group. See table below:

AVERAGE COST PER PATIENT/YEAR

Cost variable	HR-I	HR-NI
Healthcare visits related to low back	\$1,670	\$2,677
Narcotic analgesic medicine	\$70	\$160
Psychotropic medicine	\$24	\$55
Work disability days/lost wages	\$7,072	\$18,951
Early intervention program	\$3,885	\$ N/A
Totals	\$ 12,721.00	\$ 21,843.00

HR-I = High Risk with Intervention
HR-NI = High Risk with No Intervention

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References

1. Ehrmann-Feldman, Rosignol .m, Abenheim I, gibrille d. physician referral to Physical Therapy in a cohort of Workers Compensation for Low Back Pain Physical Therapy. 1996; 76:150-157
2. Zigenfus g, Yin J, Giang G, Fogarty W. Effectiveness of Early Physical Therapy in the Treatment of Acute Low Back Musculoskeletal Disorders. J occupational environ medical. 2000; 42:35-42.
3. Gatchel R, Polatin P, Noe C, Gardea M, Pulliam C, Thompson J. Treatment and Cost-effectiveness of Early Intervention For Acute Low-back Pain Patients: A one Year Prospective Study. J. Occupation Rehab 2003; 1-8
4. Abstract, Mayer T.G., Gachel RJ, Mayer H, Kishino, ND Keeley J, Mooney V. a Prospective two year study of Functional Restoration in industrial low back injury. An objective assessment procedure. J American Medical Association 1987; 258: