

Early mobilisation of acute whiplash injuries

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FROM ABSTRACT:

Acute whiplash injuries are a common cause of soft tissue trauma for which the standard treatment is rest and initial immobilization with a soft cervical collar. Because the efficacy of this treatment is unknown a randomised study in 61 patients was carried out comparing the standard treatment with an alternative regimen of early active mobilisation.

Results showed that eight weeks after the accident the degree of improvement seen in the actively treated group compared with the group given standard treatment was significantly greater for both cervical movement and intensity of pain.

THESE AUTHORS ALSO NOTE:

Rear end collisions cause soft tissue injuries of the neck. The "severity of injury depends on the degree of movement of the head and neck on the trunk and the acceleration."

Whiplash soft tissue neck "injuries frequently result in prolonged disability."

These authors examined the response of patients to the standard whiplash treatment of using a soft cervical collar and an analgesia before gradual mobilization, compared with that of another group given alternative treatment of daily neck exercises and mobilization.

This study is a prospective randomised trial where 61 consecutive patients with acute whiplash injuries were randomised to receive active treatment (31 patients) or standard (cervical collar) treatment (30 patients).

The group assigned to receive active treatment received applications of ice in the first 24 hours, then neck mobilization and daily exercises of the cervical spine. Daily exercises were performed every hour at home, within the limits of pain; no analgesia was needed for this mobilisation treatment or the exercises.

"The group given standard treatment received a soft cervical collar and were advised to rest for two weeks before beginning gradual mobilisation."

"Four and eight weeks after the accident both groups were assessed for residual pain and cervical movement by one of us (KM), who was unaware of the patient management."

"Though pain in both groups was similar initially, pain in the group given active treatment was significantly less than that in the group given standard treatment at both four weeks and eight weeks."

"Movement increased significantly in the group given active treatment at four weeks and eight weeks." "At eight weeks movement in the group given active treatment was significantly greater than that in the group given standard treatment."

"Many patients with whiplash injuries present late, after a period of immobility, with persistent pain and stiffness."

"We found that patients who are treated actively show significantly greater improvement in both cervical movement and intensity of pain compared with patients treated in the standard way."

"At four weeks a significant increase in cervical movement occurred in the patients given active treatment but not in those given standard treatment. At eight weeks cervical movement was significantly greater in the patients given active treatment than those given the standard treatment, indicating that the increase in cervical mobility occurred earlier and to a significantly greater degree with active treatment."

"At both four and eight weeks the improvement in pain was significantly greater in the group given active treatment, so that these patients had significantly less pain at four and eight weeks compared with the patients given standard treatment."

"In conclusion, our results confirmed expectations that initial immobility after whiplash injuries gives rise to prolonged symptoms whereas a more rapid improvement can be achieved by early active management without any consequent increase in discomfort."

KEY POINTS FROM DAN MURPHY:

- 1) "Acute whiplash injuries are a common cause of soft tissue trauma for which the standard treatment is rest and initial immobilization with a soft cervical collar."
- 2) Rear end collisions cause soft tissue injuries of the neck. The "severity of injury depends on the degree of movement of the head and neck on the trunk and the acceleration." **[Important, as the degree of injury does not depend on the damage to the vehicle]**
- 3) Whiplash soft tissue neck "injuries frequently result in prolonged disability."
- 4) "Many patients with whiplash injuries present late, after a period of immobility, with persistent pain and stiffness."

- 5) The group assigned to receive active treatment received applications of ice in the first 24 hours and then neck mobilization and daily exercises of the cervical spine. Daily exercises were performed every hour at home, within the limits of pain; no analgesia was needed for this mobilisation treatment or the exercises.
- 6) "The group given standard treatment received a soft cervical collar and were advised to rest for two weeks before beginning gradual mobilisation."
- 7) "Though pain in both groups was similar initially, pain in the group given active treatment was significantly less than that in the group given standard treatment at both four weeks and eight weeks."
- 8) "Movement increased significantly in the group given active treatment at four weeks and eight weeks." "At eight weeks movement in the group given active treatment was significantly greater than that in the group given standard treatment."
- 9) "We found that patients who are treated actively show significantly greater improvement in both cervical movement and intensity of pain compared with patients treated in the standard way."
- 10) "At four weeks a significant increase in cervical movement occurred in the patients given active treatment but not in those given standard treatment. At eight weeks cervical movement was significantly greater in the patients given active treatment than those given the standard treatment, indicating that the increase in cervical mobility occurred earlier and to a significantly greater degree with active treatment."
- 11) "At both four and eight weeks the improvement in pain was significantly greater in the group given active treatment, so that these patients had significantly less pain at four and eight weeks compared with the patients given standard treatment."
- 12) "In conclusion, our results confirmed expectations that initial immobility after whiplash injuries gives rise to prolonged symptoms whereas a more rapid improvement can be achieved by early active management without any consequent increase in discomfort."