

Borchgrevink GE, Kaasa A, et al. Acute Treatment of Whiplash Neck Sprain Injuries. Spine 1998;23:25-31.

Design. Randomized Trial.

Population/sample size:

- 201 patients (81 men, 120 women) age 18-70 recruited at first ER visit for neck sprain following car accident in Norwegian University Hospital setting
- Only private car crashed enrolled, no bus or large vehicle crash
- Exclusion criteria were vertebral fractures, clinical signs of nerve root compression, and concussion or other head trauma

Main outcome measures:

- Randomized to usual activity with no sick leave (n=96) or 14 days sick leave with soft collar immobilization 2 hours on and 2 hours off and at night (n=105); all received 5 day prescription for NSAIDS
- Assessment of symptoms (VAS for headache & neck pain, neck stiffness, hatch marks for area affected by pain, and pain with 17 daily activities, memory, concentration, tinnitus) at 2 weeks, 6 weeks, and 6 months
- Neurologic exam at 2 weeks and 6 months by physician blinded to assignment
- Symptom scores resolved by factor analysis into 3 factors: pain, attention, and tinnitus
- Groups compared by repeated measures ANOVA and repeated measures ANCOVA adjusting for baseline symptoms
- Both groups improved equally on pain factor at 6 months, but usual activity group had better scores on some components of pain factor: pain distribution and pain during daily activities, neck stiffness, and headache
- Use of sick leave between 2 weeks and 6 months not different between groups
- Range of motion in neck and shoulder & tinnitus not different between groups

Authors' conclusions:

- Usual activity group did better than soft collar immobilization, even though 10% of usual activity group still severely symptomatic at 6 months
- Patients with long-lasting symptoms may continue engaging in normal life activity; instruction to act as usual at first consultation may encourage this

Comments:

- Patients recruited on first consultation, but not stated how much time had elapsed between car crash and first consult
- The group with the collar also had 14 days of sick leave, which may be partly responsible for the differences in outcome with the usual activity group

Assessment: Adequate for evidence that whiplash patients who are encouraged to maintain usual activity have less neck stiffness and headache than patients given a soft collar and placed on 14 days of sick leave

