

# Practical management of whiplash: A guide for patients

This handout for your whiplash patients provides safe and sensible exercises and information to help them manage their injury.

Dr Allen is a senior fellow in Health Policy with The Fraser Institute in Vancouver. He was an associate professor of kinesiology at Simon Fraser University where he researched and published in the area of injury dynamics, including the dynamics of whiplash, and lectured internationally on this topic. He also ran a private consulting clinical practice on injury management and rehabilitation, and conducted independent examinations for injury assessment. He chaired the Physical Medicine Research Foundation 1998 Banff International Symposium entitled Musculoskeletal Pain Emanating from the Head and Neck, and edited the published proceedings. He co-chaired the BC Whiplash Initiative and was principal content author for its syllabi. Dr Allen was co-chair of the Traffic Safety and Engineering section of the World Congress on Whiplash 1999 in Vancouver, and senior editor for the Congress publication on diagnosis and treatment of whiplash-associated disorders. He currently practises out of Caulfeild in West Vancouver, BC.

**D**espite the new evidence about the mechanics of whiplash and the overriding social and legal implications of whiplash, physicians still are called upon to offer practical self-help advice to their patients on what they can or cannot do. The consensus on whiplash management is currently settling upon a combination of therapeutic approaches, which include patient information, reassurance, and mobilization or activation through neck-specific exercises. This approach has not been scientifically validated, but is a synthesis of the best current evidence. The following hand-out approach was first authored by the Physical Medicine Research Foundation in its work on the BC Whiplash Initiative, under the name *Neck Talk*,<sup>1</sup> and is based on the works in this edition of the *BC Medical Journal* as well as previous review publications that developed from the World Congress on Whiplash, Vancouver 1999, which also included works from the Quebec Task Force.<sup>2</sup>

Please photocopy and freely distribute the following pages to patients (unlimited noncommercial photocopying permitted).

---

## Competing interests

During the years about 1996 to 1999 Dr Allen received honoraria, fees for speaking, fees for organizing education, and reimbursement from the Physical Medicine Research Foundation (PMRF) for matters related to the British Columbia Whiplash Initiative. PMRF was funded by a research grant from the Insurance Corporation of BC (ICBC). Dr Allen is no longer involved with PMRF or ICBC.

---

## References

1. BC Whiplash Initiative. *Whiplash-Associated Disorders, A Comprehensive Syllabus*. Vancouver, BC: Physical Medicine Research Foundation, 1997. [www.health-sciences.ubc.ca/whiplash.bc/home.html](http://www.health-sciences.ubc.ca/whiplash.bc/home.html) (January 1998; retrieved 17 April 2002).
2. Allen M (ed). Whiplash associated disorders. *J Musculoskeletal Pain* 2000;8: 1-200.

## Practical management of whiplash

By Murray Allen, MD

### Frequently Asked Questions

#### What is whiplash?

The term *whiplash* refers to either a sudden unexpected back and forth movement of the neck, or an injury to some part of the neck caused by that motion.

#### What part is injured?

Evidence suggests that different soft tissues are injured with different severities of injury. Muscles, ligaments, discs, nerves, or some combination of these may be hurt, or in some cases, nothing is damaged at all. Injuries to any of these soft tissues can produce similar symptoms. It's not always necessary to know precisely what has been damaged, since treatments for most soft-tissue injuries are similar. Nerve damage, if it occurs, is the most problematic.

#### Who is most likely to get whiplash?

Studies show young women with flexible necks who are not very muscular are more prone to whiplash. So too are frail or elderly people with neck arthritis. But while these two groups may suffer more whiplash, their return to usual activities is generally about the same as others.

#### Can whiplash be prevented?

Whiplash can be avoided or reduced with proper headrest adjustment. The top of the headrest should be level to or higher than the ears, and close to the head.

#### What about X-rays and scans?

In more severe cases, X-rays may be recommended to check for bony injuries, but they don't show soft-tissue

damage. X-rays are also useful to check for other neck problems such as arthritis. CT and MRI scans are generally not useful in whiplash.

#### Neck and shoulder pain seem pretty common—are they?

Yes. Two of every three people suffer neck and shoulder pain, and it's more common as you age. Sedentary or inactive persons get neck aches (commonly called *kinks*) very similar to whiplash symptoms. It's important to keep your neck in good physical shape, especially if you've already suffered a whiplash injury. There are also a few diseases that can cause neck aches that require medical attention.

#### Are there different types of whiplash?

Yes. Whiplash is currently classified in three types, by degree of the injury.

**Type 1:** A mild case, which starts with a delay of symptoms by hours or to the next day, limited to pain in the neck without spasm, no loss of neck motion, minor radiating symptoms, and no localized tenderness. Full recovery is often in days to weeks. Going off work is not required.

**Type 2:** A moderate case, starts with instant pain, neck spasms, loss of neck motion, and moderate to severe radiating pain, but without physical evidence of a pinched nerve. Recovery may take weeks to months and is sometimes not complete.

**Type 3:** A severe case, like type 2 but maybe worse. Here we also have evidence of a pinched nerve. Recovery is like type 2.

#### How long does it take to recover from whiplash?

Aches and pains are part of the body's

reaction to trauma and stress, and people respond differently. One of the biggest factors in recovery is attitude. Many people can continue with their normal activities or work even though they have aches and pains that take weeks or months to subside. Generally, of those people requiring some time away from work, most can return to their usual activities in a few weeks, and half go back to usual activities within a month, even though not fully recovered. Only a small percentage can't return to work or other normal functions within a year. In type 1 whiplash, if full recovery is not prompt, then there may be other factors that are prolonging recovery, such as other medical problems in the neck, or perhaps psychological or social factors.

#### What treatments are helpful?

Most uncomplicated whiplash cases respond to a simple approach:

- Keep generally active, and do some neck exercises.
- Stay at work or return as soon as you're able (don't wait for 100% recovery).
- Make time for activities that help reduce stress.
- Keep a positive attitude about yourself (complaining makes it worse).
- Keep a positive attitude with others (a neck injury isn't a good way to get attention).

#### What about other therapies?

Currently, the research on therapies for whiplash is inconclusive. The following are some recommendations and precautions:

- Very short-term use of pain drugs may help in the first few days only.
- Prolonged use of painkillers or muscle relaxants may be harmful,

because they can reduce your threshold for pain tolerance.

- Research has not found any clinical benefits from passive therapies such as ultrasound, hot/cold packs, acupuncture, massage, TENS, electrostimulation, magnets, or laser therapy.
- Prolonged use of passive treatments may be harmful.
- Manual treatments such as neck mobilization may be helpful in the beginning, but are not recommended as long-term treatments.
- Vigorous or unskilled neck manipulation may re-injure the neck.
- Prolonged rest periods or use of a collar weakens tissues and slows recovery, and may actually *cause* the symptoms of whiplash.
- If some passive treatments are combined with an activation program, it is probably the activation part that is helping.
- If a treatment is going to help, you should feel some improvement in days to weeks; if not, stop it and reassess your treatment options.

**What does “take it easy” mean when talking about my whiplash injury?**

It absolutely does not mean to go to bed or lie around a lot! Complete rest promotes muscle and other soft-tissue weakness, especially around injured tissues. It *does* mean avoiding activities that involve sudden or jerky stressful movements. “Active rest,” which means taking a few breaks or a brief rest in order to continue with your day, is okay.

**Is it in my head?**

Most physical pain and suffering has a psychological component—especially when pain persists, when it can sometimes cause fear, anxiety, or depression. That is normal. However, if you focus too much on your suffer-

ing, the fears and anxieties can actually make the problem worse. Some people use pain to seek sympathy and attention from others, to get compensation, or to get out of work that they don’t like. If you find yourself dwelling on pain and suffering, reassure yourself, and seek help from your doctor.

**How do I know if I’m getting better?**

Recovery from whiplash begins with increased function, even though you may feel the same pain. If you are becoming more active, you are getting better. The pain is usually the last thing to go. Doing less will end up hurting more.

**When should I return to work?**

An interesting research study compared whiplash patients who were told to stay at work with those who were told to stay off work for 2 weeks. All other treatments were the same. The stay-at-work group did the best. There is something therapeutic about staying in the mainstream of your life; losing the momentum of your usual activities could delay your recovery. Coping with some pain is not dangerous, and you will be better off in the long run.

**What is the purpose of exercise?**

If you don’t exercise your neck properly, it will age more quickly and cause neck aches. When tissues are not used, they get weaker and can be more easily sprained. This applies to muscles, ligaments, tendons, joint cartilage, and disc cartilage. Worse yet, if joints are not regularly moved as far as they are capable of moving, they develop scar-type tissue at their edges that tethers or kinks the joint and prevents it from moving properly. This can lead to joint degeneration. Injured tissues

are often held still, which in fact kinks the joints more, leads to faster weakening, and prevents proper healing. Exercising injured tissues actually aids in their faster recovery, or at least the scar tissue heals in the manner to allow for proper joint movement. That’s why it’s important to exercise the healthy neck to keep it healthy, but it is even more important to exercise the injured neck to help it heal properly.

**Neck-specific exercises: The basics**

**Precautions**

Most whiplash experts agree that exercise is safe and helpful for whiplash, and for neck aches generally. Just in case, talk with your doctor to make sure it is safe for you.

If you experience any of the following symptoms during or after your neck exercises, reduce or stop them until you have spoken with your health professional:

- Dizziness, spinning feeling, vertigo, confusion, blurred vision, fainting, or disorientation.
- Sudden pain shooting down the arm, or numbness and/or weakness in an arm or hand.
- Unusually severe or persistent neck pain that is not relieved by changing neck position, or persists at night.
- Any symptom that puzzles or confuses you, or if you don’t know what is happening.

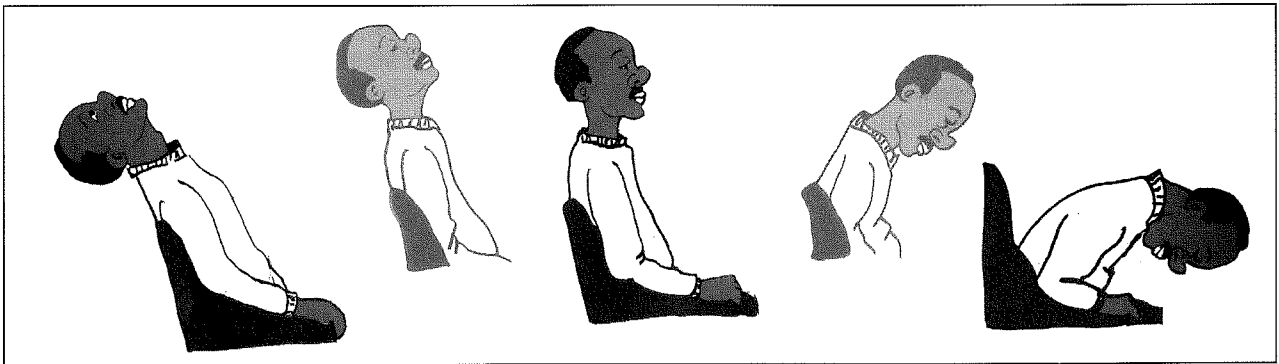
**These exercises can be done almost any time and any place**

For each exercise:

- When doing neck exercises, do them smoothly, without sudden jerks. Keep your mouth and jaw relaxed. At first the movements will likely be done slowly and cautiously; later you can speed them up.
- Try to be equal in how far and how

fast you move your neck to each side. If one side is stiffer, that is probably the direction you need to do more exercises in order to bring it equal to the good side.

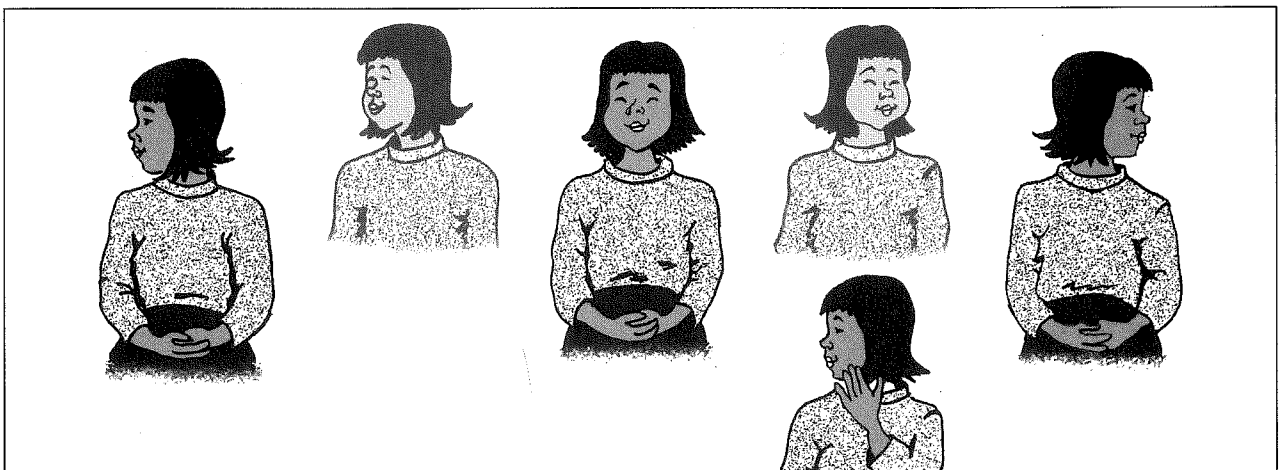
- Move your head as far as it will go in each direction, and hold for about 5 seconds. Then move it in the opposite direction as far as it will go and hold for another 5 seconds.
- Repeat each exercise about five times for each direction (except #5 which can be done up to 100 times).
- Expect some discomfort; becoming more flexible and stronger in the neck does not come quickly or easily. It may take several weeks before you start to notice the benefits.
- When first performing your exercises, expect some noise out of your neck. Snaps, pops, and clicks are all common. Later on, the noise tends to lessen. You might find that the exercise that gives you a “pop” feels better afterward.
- Each set of exercises takes only a few minutes. Repeat each set three to five times per day.
- Consider doing some general exercises and aerobic exercises, since it’s important to keep the rest of your body in shape too. Don’t expect general exercises to help the neck specifically—that requires neck-specific exercises.



© Dr Murray Allen

**1. Back and forth (Flexion and extension)**

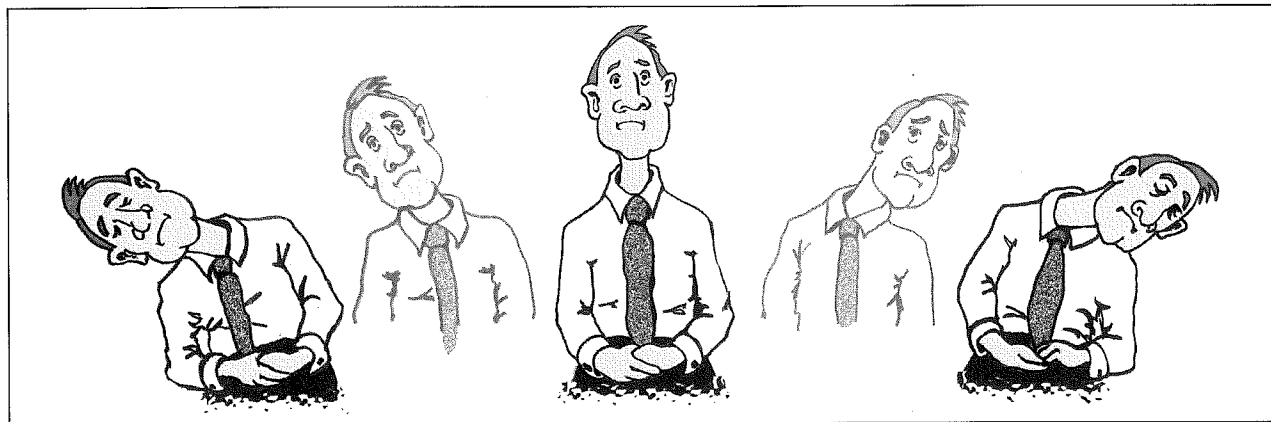
Tilt your head backward as far as possible, hold for about five seconds. Then slowly swing your head forward as far as you can. Gentle pressure by a hand on your head may help you reach your end-of-range.



© Dr Murray Allen

**2. Rotation**

Rotate your head and upper body all the way to one side, hold for 5 seconds, then rotate to the other side and hold for 5 seconds. A little pressure on your cheek helps you move it all the way.



© Dr Murray Allen

**3. Side to side**

Tilt sideways with your head and upper back, let your head relax for 5 seconds, then move to other side and let your head relax for 5 seconds. Added gentle pressure on your head may help to move your neck to your end-of-range.



© Dr Murray Allen

**4. Diagonal**

Rotate your head to one side, then look all the way up, then all the way down. Repeat for the other side. Repeat five times.



© Dr Murray Allen

**5. Rock and roll**

Lie on your back and rock your head gently to one side, then the other. Keep repeating this rocking motion about 30 to 100 times, and gradually increase how far you rotate to each side. At first you may have to perform the rock and roll slowly, but later you can pick up the speed. This set can be done once a day.