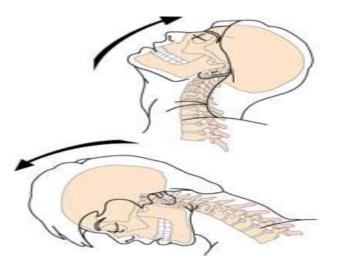
Laser Spine and Sport

www.LaserSpineandSport.com © Dr. Larry Basch, D.C., CCSP, CCEP United States Marine Corps Sports Chiropractor

Quick Auto Accident Injuries

What You Need To Know About Your Injuries And Your Insurance Rights

The Cervical Acceleration/Deceleration Syndrome



Complements of

Dr. Larry Basch, D.C, CCSP, CCEP

If you or someone you care about has been in an auto accident, there are some very important things you need to know regarding your health.

DO NOT settle an insurance claim until you have read through this report, <u>and</u> have been properly examined by a trained specialist in soft tissue and whiplash injuries. What you don't know <u>will</u> hurt you later! Don't Risk Your Health

Dr. Basch has been treating auto injuries since 1993 and has additional training in treating whiplash injuries and has received Advanced Certification in the Treatment of Whiplash Injuries from the Spine Research Institute of San Diego.

We can also help you find an honest, ethical personal injury attorney experienced in this types of cases.



DO NOT settle an insurance claim until you have read through this report, and have been properly examined by a trained specialist in soft tissue and whiplash injuries. What you don't know will hurt you later!

Don't Risk Your Health

This can be a very stressful time after an auto accident. Trying to repair your vehicle, deal with the insurance agents, claims adjusters and other parties involved. What about your injuries? How do you know you have any injuries? Where do you go for treatment?

Were you also aware that most auto accident

injuries are hidden and seldom detected for months or even years later?

Worse than that, most auto accident victims are unaware of the damaging effects of hidden injuries so they release the insurance company from liability by settling their case before being examined by a trained specialist.

This is a gigantic mistake!

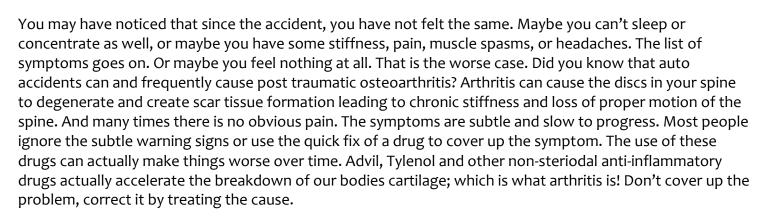
Why? Because many auto accident victims receive inappropriate care from either the hospital, medical doctor or physical therapy clinic. Then, while the underlying damage and pain is hidden or covered up with medication, they settle their case.

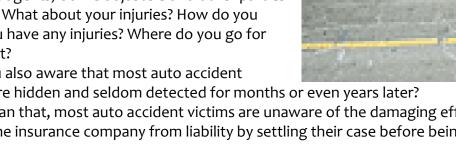
This is a big mistake. Don't let this happen to you!!

Because if you do, you may experience pain, numbness, headaches, muscle stiffness, fatigue and other problems including Arthritis many months down the road. Remember, nothing is more important than your health, especially when you start to lose it!

Here's where the problem begins. Most people involved in an auto accident have one thing on their mind: the damage to their auto! Who is going to pay for the damage to my car? Will my insurance rates go up? What will I drive in the mean time?

And the last thing on your mind is, Am I Really Alright?









Most Doctors are not trained in the detection of these hidden injuries. Most doctors use over-the-counter or prescription drugs to treat these soft tissue injuries. Drugs only cover up your pain and other symptoms.

If you have been in an auto accident, you need a doctor that is trained in the biomechanics of the human body. That means that he or she can perform special orthopedic and neurological tests as wells as other functional tests that can assess soft tissue damage, muscle strength, range of motion, and joint and nerve function. In addition, special x-rays can be taken to find out if there has been any structural damage. As a matter of fact, even most medical doctors are unaware of these specific examination and x-ray techniques.



BEFORE YOU TALK TO ANY INSURANCE COMPAIES, HERE ARE SOME VERY IMPORTANT QUESTIONS YOU MUST CONCIDER:

SHOULD YOU CONSULT AN ATTORNEY?, AND IF SO WHEN? WHO?

HOW DO YOU FIND THE RIGHT ATORNEY?

It is important to have an expert trained to examine auto accident injuries prior to consulting an attorney. That way the findings of your exam will allow you the information necessary to decide if you may or may not need to involve an attorney. If necessary, we can refer you to one of our qualified expert auto accident attorneys. In many cases today, insurance companies are extremely difficult to deal with. Therefore, make sure your attorney specialize in personal injury. The neighborhood family practice attorney does not have the expertise to deal with insurance company attorneys and accident reconstructionist. We can recommend an experienced, honest attorney to give you good, sound legal advice.

WHAT IF YOUR CAR SUSTAINED LITTLE OR NO DAMAGE?

Numerous scientific studies have proven that the amount of damage to the vehicle bears no relation to the force applied to the spine of the occupants of that vehicle. Insurance companies repeatedly claim that if there is no vehicle damage, there can be no injury. This is their way of denying you compensation for your injuries, damaged vehicle repairs, and pain and suffering award settlements. You need to be prepared to fight the insurance companies for your rights. Having an expert, knowledgeable in the examination, treatment, and documentation is the most important partner in resolving these problems.



WHAT ARE YOUR INSURANCE RIGHTS REGARDING PAYMENT FOR YOUR ACCIDNET RELATED INJURIES? Most auto insurance policies have medical treatment coverage for accident related injuries. This is called "Auto Med Pay". This means your medical bills may be covered at 100% up to the policy limits. Using your Med Pay will not raise your premiums. Many so-called "bargain" or "discount" insurance companies do not include Med Pay coverage. If you do not have Med Pay, you should review your policy and consider adding this coverage to your insurance plan. It could be very valuable if you are involved in a serious accident.



Do not settle or sign anything until you have had an examination at our office. Do not even talk with the insurance company. If you say the wrong thing, or settle before your injury is fully resolved, you will be completely on your own and have no future rights for payment of your injuries. Insurance companies constantly try to get people to settle quickly before they realize they are in pain. Once an injury claim is made, the insurance then argues your injury and stalls in making payment. The longer the insurance company can hang on to the money owed, the more interest that money makes them. They earns millions in interest by investing your insurance premium payments.

YOU HAVE BEEN TO THE HOSPITAL OR MEDICAL DOCTOR, WHY SHOULD YOU SEE ANOTHER DOCTOR?

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Remember, many times the injuries suffered in an auto accident may not be apparent and may not give you noticeable symptoms for weeks, months, sometimes years later. You need a doctor that is trained in the biomechanics of the human body. That means that he or she can perform special orthopedic and neurological tests as wells as other functional tests that can assess soft tissue damage, muscle strength, range of motion, and joint and nerve function, and then provide treatment to restore the proper motion to the inured joints. Medical doctors can only provide you with medication and surgery.

Even a minor automobile accident at very low speeds can cause serious injury and result in long term health problems. You may or may not have any symptoms at this time, but it very important to have your spine examined. When very heavy objects (such as autos) which are moving, collide, they must transfer the impact energy (Laws of Physics state: energy can not be created nor destroyed, only transferred). In the case of an auto collision, the energy of the impact is not only transferred but it is multiplied (due to the weight of the autos) and can become 2 3 times greater by the time it reaches the occupants of the vehicle. Research shows that an 8 mile per hour collision sends 2 gravitational units (G's) through the car's bumper. By the time this energy is transferred from the collision into your body, your shoulders receive 4 G's and your neck receives 5 G's of force: 1 G = Earth's Gravity, 1 G =37.5 miles per hour. This translates to 187 miles per hour, which means all this energy is transferred into your body, and this is at 8 mph.

Many times there is little or no damage to today's high tech plastic automobiles. These cars are designed to absorb the energy of impact, which means this energy must be transferred. We as occupants then absorb this energy which throws us around inside the car all within milliseconds. This creates the Whiplash Phenomena. This phenomena know as Whiplash or cervical acceleration/deceleration syndrome occurs when your head, neck and spine are suddenly whipped backwards and forward beyond normal limits. all within approximately 300 milliseconds. In this short time your body's protective mechanisms,



such as muscles, tendons, ligaments, vertebra and nervous system can not react in time. Many times the pain and discomfort may not appear immediately after the accident. It may take a few hours, days or even weeks or months for the symptoms to become noticeable. These injuries are real and require special treatment. Drugs only cover the pain, but do not address the ultimate cause of the injury or aid in the proper healing. Many drugs actually delay the proper healing of injured tissues. I have specific natural, nutritional products to assist in natural pain control and for proper, complete healing without any of the side effects of drugs. Please ask for details on how important nutrients are to your healing.

There are a variety of causes of this serious problem, not only auto collisions. Many everyday activities can cause the spinal vertebra to lose their normal position or motion. Poor posture, sports, old injuries and previous auto accidents can result in improper biomechanics of your spine, causing spinal decay leading to nervous system dysfunction and ultimately, ill health.

The chiropractic approach to better health is to detect, reduce and help prevent spinal dysfunction and treat the vertebral subluxation complex through manipulation of the spinal vertebra.

When sudden auto collisions occurs, the impact energy causes the normal curve in your neck to become straight or reversed. As a result of the impact, the bones in your neck and spine move out of their normal position, which is called a vertebral subluxation. There is also further underlying damage to the "soft tissues"

(muscles, tendons, ligaments, discs) causing microscopic tears, inflammation, bruising and pain. Decreased motion of these muscles and joints, pressure on the disc, stretching and irritation to the spinal cord and pinching of the branching spinal nerves, are all due to the sudden whipping of the head and neck. If the resulting injuries are left untreated, permanent scarring will occur in the soft tissues resulting in a variety of symptoms such as chronic muscle pain, stiffness, reduced motion, numbness or tingling radiating into the hands, arms, legs, headaches, dizziness. Mal-position of the vertebra can result in instability of the spinal column causing these symptoms to persist for months to years after the injury has occurred, leading to future health problems and degeneration of the spine, joints and discs (Arthritis). This can be treated and prevented naturally with proper chiropractic care. Treatment may take weeks for complete healing, please be patient and follow our recommendations for the best results.

Doctors of chiropractic are the only doctors whose are specially trained to perform spinal manipulation, and in the treatment of the vertebral subluxation complex and whiplash. Research has shown that manipulation of the vertebra is the preferred and most effective method of treatment for these "soft tissue" whiplash injuries. This means that only chiropractors can help to reduce your pain and discomfort Quickly, Safely, and Naturally without the use of drugs and surgery. I will work with you to restore normal function and alignment of your spine and help in the healing the injured muscles, tendons and ligaments. You may not have any symptoms now, but you should always have your spine examined by a Doctor of Chiropractic. Don't risk your health. Many auto and health insurance plans will cover all or a portion of your required treatment. I have received special advanced training in treating these types of injuries. Please tell others about this important information. We can help others if they know about us.

We can help you & others to:

- 1. Get out of Pain
- 2. Prevent Future Pain
- 3. Deal with the Insurance Companies

Call our office Today for a Free Consultation to see how we can help.

Remember, many times the injuries suffered in an auto accident may not be apparent and may not give you noticeable symptoms for weeks, months, sometimes years later.

These injuries may result in **permanent** changes to your body. This can lead to spinal decay or Arthritis.

Don't Risk Your Health!

WHIPLASH



Between the tiny bones of the neck are joints that are pulled together by rubber band-like ligaments. Muscles attach to these bones and pull them apart. This cooperation results in a neck that naturally curves to the front of the body.

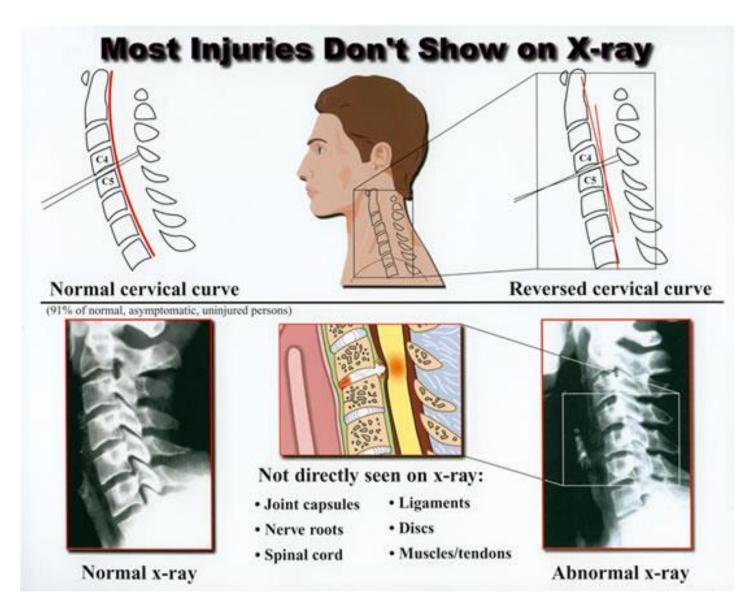
Upon impact, from a rear-end collision, your head and neck are hurled backwards and forwards. From the whipping back and forth of "Whiplash," these gentle supporting tissues are pulled, twisted and torn. The discs between the bones can be easily crushed and the gelatinous material may bulge or herniate, compressing the spinal cord and nerves. The natural curve may also completely reverse itself.

If you know others who need to change their lifestyle for the better, we ask that you please share this information with them.

C1995 Bernard Furshpan, D.C.



"An educated patient is a healthier patient."



Some Brief Facts:

- The *total cost* of Motor Vehicle Accidents in 1993 exceeded \$167 billion dollars.
- An estimated cost of "*Motor Vehicle Accident related soft tissue injuries*" in the U.S. each year is \$19.1 billion
- More than 10.5 million persons are subjected to crashes each year.
- ♦ Dr. Arthur Croft has calculated that there are 2 million <u>rear impact</u> accident related injuries in the U.S. each year, giving whiplash an incidence of 770 / 100,000. Although <u>rear impact</u> collisions comprise only 25% of all accidents, they account for 39% of all motor vehicle accident injuries.
- Low Speed Rear Impact Collisions (LOSRIC) comprise a large proportion of all rear impact collision injuries. Most modern passenger vehicles can withstand crash speeds of up to 8 or 9 mph without sustaining visible damage.
- The reported threshold for soft tissue injury of the neck in healthy adult males is 5 *mph*, modern passenger vehicles can crash at nearly twice this injury threshold, yet appear undamaged.
- There is no scientific basis for estimating or calculating the probability of soft tissue injury to the occupants of vehicles based on property damage to the vehicles.
- It is estimated that as much as <u>55%</u> of the rear impact collisions are *not reported* to the police partly because, in some areas, police will not respond to the scene of non-injury accidents.

There is so much new information available. For your convenience, I have tried to condense this presentation. The following is a summary of Dr. Croft's Whiplash Slide Presentation.

Historical Perspective:

The most important early work on the whiplash phenomenon was performed by Severy et al (9) in the 1950s at UCLA. They set out to test a theory that the acceleration of the occupant of a vehicle was greater than that of the vehicle itself. They used both an early model anthropometric dummy and a human volunteer. At a crash speed of <u>8 mph</u>, the human occupant was exposed to accelerations <u>2.5 times</u> that of the vehicle itself, thus confirming the hypothesis of the researchers and providing new insight into the mechanism of low speed rear impact collision (LOSRIC) injuries.

Why should you refer a patient/client to a doctor of chiropractic (D.C)?

- 1. D.C.s have the most experience in treating these cases. Naturally one might argue with this statement, but it means that D.C.s not only frequently provide care for whiplash victims, they provide the broadest range of care.
- 2. D.C.s have full diagnostic capability. That means that they can order imaging studies, laboratory tests, and electrodiagnostic tests. D.C.s can work with a number of specialists and, thus, can be an effective case manager.
- 3. As mentioned in #1, the broad range of care provided by the D.C. includes not only spinal adjusting, but deep tissue therapy, physiotherapeutic interventions, and advice about home care, exercise, nutrition, and activities of daily living.
- 4. D.C.s are also able to provide assistance in the form of open channels of communication, timely and well written report, and expert sworn testimony when required.

We will highlight some of the important points made in our presentation.

- 1. Most LOSRIC injuries occur between <u>6 mph and 12 mph</u>. Frequently in this range <u>no</u> property damage results. The myth of "no crush, no cash" should be put to rest.
- 2. Objective findings are generally present. These may take the form of radiographic findings, trigger points, limited ranges of motion, positive orthopedic tests, and muscle spasm.
- **3.** Many of the symptoms once attributed to neurosis are now known to be common following whiplash injuries and have an organic explanation.
- 4. Delays in onset of symptoms are not only common, but are more common than immediate onset of symptoms. There is no justification for using such delays to suggest that patients are disingenuous.
- 5. Many accident reconstructionist reports are inaccurate and all such reports should be carefully scrutinized.
- 6. The D.C. is the logical choice for case manager in whiplash trauma, and offer the highest rating in patient satisfaction.

What is 'whiplash'?

'Whiplash' is what happens when someone's head moves forwards and then backwards quickly. This quick back and forth movement may cause injury to the neck.

This whiplash movement often happens in car crashes. People who have been in a crash often complain of neck pain and stiffness afterwards, sometimes even a few days after the accident. For most people the pain is mild, does not interfere with their normal activities and gradually gets better. Research indicates that people who carry on with their normal activities recover faster than people who stay at home and reduce their activities.

Some people have more severe neck pain. They may also experience:

- headaches
- pain in the shoulders and arms
- dizziness or altered sensation
- weakness in the arms.

These people should see a doctor immediately since they may have a Whiplash-Associated Disorder, or WAD as it also known.

What is WAD?

The term WAD stands for Whiplash-Associated Disorders. It covers a range of neck problems resulting from the whiplash motion of the accident. These can range from no discomfort at all to very severe injuries.

To help the doctor work out how serious your injury is and the most appropriate treatment, the neck problems from a whiplash have been grouped into four 'grades' of WAD.

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Grade 0 no pain or discomfort. No physical signs of injury.

neck pain, stiffness or tenderness. No physical signs of injury. neck pain, stiffness or tenderness and some physical signs of injury such as point tenderness or trouble turning the head.

pain, stiffness or tenderness and neurological signs of injury, such as changes to reflexes or weakness.

pain and fracture or dislocation of the neck.

When should I seek medical advice?

You should seek medical advice after an accident if you have:

• medium to severe pain in your neck

• neck pain plus stiffness (you have problems turning your head)

• arm numbness or weakness

• drowsiness, nausea, vomiting, confusion

• any complaints that are not getting better or are getting worse.

These symptoms may mean you have WAD.

It is important that you see your GP for a medical assessment. A registered health professional such as your GP, physiotherapist or chiropractor is the best person to advise you about how to manage your whiplash injury.

It is also important that you tell your GP of other professionals who may be treating you.

How is WAD treated?

Your doctor will provide you with information, advice and the best treatment.

If your pain is mild, the doctor will advise you to continue normal daily activities and, if required, use pain-relieving medication such as paracetamol.

If you have more severe pain, you may be advised to continue with light activities, use pain relieving medication and do exercises. The exercises will help to restore movement and flexibility in your neck, and ensure that your muscles are acting to support the neck. Examples of exercises are shown on pages 11 to 14.

In many cases your doctor will ask that you return to check your progress, usually within a week of your first visit. Your return visit is important.

In some cases (especially if there is no improvement) the doctor will send you for additional treatment.

Many treatments have been used for whiplash. A Working Party of experts in this area has reviewed what is known about the effectiveness of treatments for WAD in the first 12 weeks and grouped them into three categories:

- Treatments that are recommended
- Treatments that may be used
- Treatments that are not recommended

How long will it take me to get better?

This will depend on the extent of your injury. Every injury is different.

Most people will be able to continue with their normal activities, but it may take weeks, or even months, for the discomfort to go away completely.

If you have had to reduce your normal activities, you should be able to return to them within weeks.

It may seem that it is taking a long time for you to recover. If you are worried about this, or if your pain gets worse, see your doctor immediately.

What can I do to help me get better?

Gently exercise your neck to restore movement and flexibility and to ensure that the muscles are acting to support your neck. Examples of exercises are shown on pages 11 to 14. Try to stay active. Do as many of your normal activities as possible. Staying active helps you to recover more quickly. Stay at work if you can. People who stay at work after an accident recover more quickly than those who take time off.

Don't use a collar without advice from your doctor or therapist. Most people don't need to use collars, and using one unnecessarily may slow your recovery.

Initially avoid heavy lifting and sitting for a long time. It is most important to stay generally active but it is wise to prevent excessive strain on your neck in the early stages after injury. For example, stand up from a sitting position at regular intervals or perform some of the gentle exercises while sitting as shown on page 13. Divide heavy loads (e.g. grocery shopping) into several lighter loads for carrying.

Relaxing both body and mind will help you manage any pain more easily.

Treatments that are recommended

Act as usual: you may have pain but maintaining your normal activities is an important factor in getting better.

Exercise: specific exercises to restore muscle control and support your neck should improve postural control and prevent unnecessary postural strain. Exercises that may help you are on pages 11 to 14. General exercise and activity are also important. **Pain relieving medication:** pain relieving medication such as paracetamol can be prescribed. For more severe cases, anti-inflammatories can be prescribed in the short term to reduce pain and swelling. Use of medication should be limited as it may have side effects.

Treatments that may be used

Advice about posture: advice about how to sit and stand correctly can be helpful in addition to maintaining usual activities and exercising.

Joint Mobilisation: a therapist gently and repetitively moves the joints in the neck region to reduce pain and restore normal movement in the neck. This can be used if it reduces your symptoms. It is important that your therapist is registered, qualified and trained to do mobilisation.

Spinal Manipulation: a therapist applies a gentle quick single thrust to the joint to the limit of its range of movement. This produces a clicking sound. The manipulation aims to reduce pain and restore motion. It can be used if it reduces your symptoms. You should check that your health provider (medical practitioner, chiropractor, osteopath or physiotherapist) is registered, qualified and trained to do manipulation. Complications from manipulation are rare but include stroke and death.

Combination of Treatments: a combination of treatments such as exercise and mobilisation can be used.

Traction: a machine gently stretches the neck. Traction can be used with other treatments. There is no evidence that traction works for WAD, so it should only be used if it reduces your symptoms.

Acupuncture: fine needles are inserted into specific points on the body. There is no evidence that acupuncture works for WAD; it should only be used if it reduces your symptoms.

Improving your environment: learning about the structure of your neck and how it works can be helpful. Improving your work practices can lessen unnecessary strain and allow you to function well in your normal daily activity. For example, the chair you sit on at work may need adjusting. It may also help to stand up for a break or change position every 20 minutes. If you have learnt relaxation techniques these may be helpful in managing pain associated with WAD.

TENS, heat, ice, massage, ultrasound, laser, short-wave diathermy: TENS (Transcutaneous Electrical Nerve Stimulation) is a low frequency, painless electric current sent through the skin to reduce pain.

This and other passive treatments/electrotherapies, if administered by trained professionals, are additional treatment options during the first three weeks. They are used with manual and physical therapies and exercise to help you return as soon as possible to your usual activity.

Rest: a period of bed rest is not recommended for people with WAD Grade 1. People with WAD Grades 2 and 3 should not have bed rest for more than four days.

Surgical Treatment: in almost all cases of WAD Grades 1 to 3 surgery is not required.

Collars: the use of a collar, sometimes called a neck brace, is not recommended for WAD Grade 1. If prescribed for WAD Grades 2 and 3, a collar should not be used for more than three days as it may slow your recovery.

Exercises that might help

The following exercises should help to heal your neck.* Perform all exercises in a slow and controlled manner.

The exercises are designed to restore the movement and muscle control around your neck and to reduce unnecessary postural strain and muscle pain.

When you are performing the exercises, stop and contact your doctor or therapist if you notice:

• dizziness, light headedness, blurred vision, fainting or disorientation

• sudden pain shooting down your arm, or numbness or weakness in your arm or hand

• unusually severe neck pain

• exercises consistently producing a headache, which persists.

For each exercise:

• move smoothly and slowly, without sudden jerks. The key is precision and control.

• keep your mouth and jaw relaxed. Keep lips together, teeth slightly apart and let your tongue rest on the roof of your mouth.

• gently hold your shoulders back and down so that they are relaxed while doing all exercises.

• in movement exercises, try to move the same distance to each side. If one side is stiffer, move gently into the stiffness. Move to that direction a little more often.

• expect some discomfort, but remember exercises should not cause severe pain.

Treatments that are not recommended

Cervical pillows: the use of commercially-made contoured pillows is not recommended as there is no evidence to prove their usefulness.

Spray and stretch: spraying the muscle with a cold spray followed by muscle stretching is not recommended as there is no evidence that spray and stretch works.

Injections of steroids: steroid injections are not recommended for WAD Grades 1 and 2. Steroid injections may be used for WAD Grade 3. Repeated steroid injections may cause harm. Injections: injections of local anaesthetic or sterile water into nearby nerves are not recommended in the early stages of WAD. Magnetic necklaces: wearing a magnetic necklace is not recommended as there is no evidence to prove their usefulness. Pilates, Feldenkrais, Alexander Technique, massage and homeopathy: these are not recommended for the first 12 weeks as there is no evidence to show they work during this period.

* Jull GA, 'The management of cervical headache', Manual Therapy 2(4):182-190.

Neck Exercises Lie down with a soft pillow under your neck, and with your knees bent up.

The chin nod exercise

Gently and slowly nod your head forward as if to say 'yes'. Feel the muscles at the front of your neck. Stop the nodding action just before you feel the front muscles hardening. Hold the nod position for five seconds and then relax. Gently move your head back to the normal start position. Repeat up to 10 times.

Head rotation

Gently turn your head from one side to the other. Look where you are going. Progressively aim to turn your head far enough so your chin is in line with your shoulder and you can see the wall in line with your shoulder. Repeat 10 times to each side.

Correct postural position

Correct your posture regularly by gently straightening up your lower back and pelvis. Now gently draw your shoulder blades back and down (women towards their bra clip). Hold the position with ease for at least 10 seconds. This position will prevent and ease muscle pain and tension in your neck and

shoulder muscles. Repeat the correction







regularly, every half hour during the day. You can do this exercise at work, in the car, train or bus and sitting at home.

Neck isometric (no movement) exercise

Sit in the correct postural position as described above. Make sure your chin is relaxed and slightly down. Place your right hand on your right cheek. Gently try to turn your head into your fingers to look over your right shoulder but allow no movement. Hold the contraction for five seconds. Use a 10% to 20% effort, no more! Repeat with the left hand on the left cheek. Do five repetitions of the holding exercise to each side.

Sit in the correct postural position. Repeat all exercises below 10 times to each side. **Rotation:** gently turn your head from one side to the other. Look where you are going, progressively aim to see the wall in line with your shoulder. This exercise is similar to the one you did lying down. This

time you do it sitting. Side bending:

gently tilt your head towards your shoulder and feel the gentle stretch in the muscles on the side of your neck. Perform the movement to both sides.

Bending and

extension: gently bend your head towards your chest. Lead the movement with your chin. Moving the chin first, bring your head back to the upright position and









gently roll it back to look up towards the ceiling. Leading with your chin, return your head to the to the upright position.