

In Case of Automobile Accident

Follow these Instructions!

By Mark Schillinger, D.C.

The ever-increasing number of automobiles rolling onto our congested streets and highways are contributing to the growing frequency of automobile accidents. These accidents cause death or injuries ranging from muscle strain to permanent bodily damage. The most common injury is neck "whiplash" - a sudden snapping of the neck forward and backward. The purpose of this article is to educate you as to how to take care of yourself if you've been in an accident. There are two aspects to this need: (1) the health care issue, and (2) the insurance and legal issue.

Let's begin by using an example of a patient of mine, Mary, who was recently in a car accident. Mary was struck from behind as she was waiting at a traffic light near a local shopping center. There was only minor damage to her car and at the time no one appeared to be hurt. Mary was startled, and astonished that she had actually been in a car accident. She didn't get the name and insurance information from the other driver and didn't report the accident to her insurance agent.

While she was shopping a headache began to develop, and her neck became sore and stiff. She went home thinking the headache would go away. The next morning she felt worse and discovered her shoulders and mid-back also hurt. After several days without improvement she began to experience numbness and tingling sensations in her right arm. Her husband, a patient of mine, brought her to my office. Within a short period of time her pain symptoms were eliminated. Now we're working to permanently correct the underlying spinal and muscular problems.

Why do I relate this story? The point of this episode is that when you're involved in a car accident, seek qualified health care immediately. Promptly proceed to give the insurance and legal



Dr. Mark Schillinger is the director of Schillinger Chiropractic Group. The clinic specializes in stress management care utilizing chiropractic adjustments and a complete physical therapy department. Personalized exercise, nutritional and stress reduction therapies are shared with each patient.

issues the proper attention. Before explaining in detail how to handle the health, insurance and legal issues, let's review the anatomy of the neck and the mechanism of a whiplash accident.

Anatomy of the Neck

The head weighs approximately ten pounds. It's fastened to the neck where the occiput meets the first neck vertebrae (atlas). The neck is made up of seven small vertebrae (cervical spine) and gives full support to the head. When viewed from the side (illustration #1), the neck has a "C"-shaped curve. This curvature must be maintained to allow a clear channel for the passage of the spinal cord which travels through the center of the neck bones. The spinal cord sends off spiral nerves in between each vertebrae. These nerves control the movement of muscles in the neck, mid-back, shoulder, arms and fingers. The sensitivity of the skin in these areas is also controlled by these nerves.

In between the vertebrae are the soft intervertebral discs which assist the neck to move. The vertebrae are held together by layers of ligaments and

muscles. Arteries, veins, lymph nodes and nerves traverse through the soft tissue (illustration #2).

Mechanism of Whiplash

The word "whiplash" is one we are all familiar with. This term comes from the fact that the mid-back (thoracic spine) is held still by the rib cage and acts as the handle of the whip. The cervical spine, supported by muscles only, acts as the end of the whip. Specifically, when one's car is struck by another from behind the impact causes an involuntary thrust of the head and neck backwards (hyperextension), while the rest of the body continues to move forward with the momentum of the car because it's supported by the front seat. The driver of the car automatically applies the brakes to stop the car. The rapid deceleration of the car, as well as the elastic recoil quality of the soft tissue in the neck area, throws the head and neck violently forward into hyperflexion.

Thus, the driver's body continues to move forward, pushed by the back seat. The head and neck snap backward. A car weighing 3,500 pounds traveling at a speed of 10 miles per hour creates a force of 35 tons. After your car has absorbed the initial shock, over one ton of force may remain to be exerted on your body at the moment of impact.

As a result of the hyperextension/hyperflexion reaction, chemical and structural changes occur in the bony spine and soft tissue (muscles, ligaments and intervertebral discs). Muscles and ligaments in the neck stretch and/or tear resulting in strains or sprains. This causes swelling and sometimes hemorrhaging within the muscles. If the neck vertebrae compress, the discs between the vertebrae can protrude or even rupture, and the joints which connect the bones can jam against one another (capsulitis). Disc protrusion and capsulitis will cause the nerve roots to become irritated by the excessive pressure.

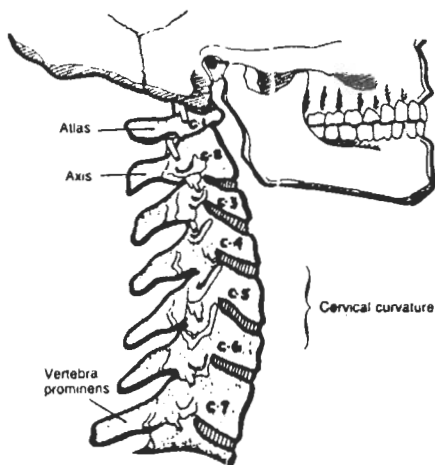


Illustration #1

Whiplash Symptoms

It's important to remember "whiplash" is just a descriptive term. It is not a diagnostic term - i.e., the symptoms people experience from whiplash are varied, even though the mechanism of the whiplash is similar for everyone. The most common symptoms are: (1) headache, (2) neck pain, (3) numbness in the arms and hands, (4) nausea/vomiting, (5) low back pain, (6) blurred vision, (7) insomnia, (8) tinnitus, (9) poor concentration, and (10) fatigue.

Most of these symptoms can be explained by the fact that the nerves and blood vessels become irritated or constricted. The muscles, skin and organs that these vessels nourish literally lose their energy source. The symptoms are a result of this.

It's imperative that these symptoms be examined and treated by a competent health care practitioner before complications arise. Soft tissue and spinal degeneration can occur even with a minimum of symptomology. Untreated inflamed soft tissue can lead to fibrosis or hardening of muscles and ligaments. Fibrosis causes loss of range of motion in the joints and painful pressure points in the muscles. Changes in the bony structure of the spine are easily evidenced by x-ray analysis. Following a whiplash, the normal cervical curvature is lost, forming a straight neck or even a reversed curve. This is due to the enormous

force exerted by the muscles pulling on the neck vertebrae.

When a vertebrae is moved out of alignment this will produce irritation on the nerves. Chiropractic physicians have long recognized this phenomena and call it a subluxation (misalignment). The most common complication of this condition is osteo-arthritis. Calcium deposits are sent into the disc space, joint space or the individual vertebrae. This is the strategy the body uses to prevent further damage to the neck by inhibiting painful neck movement.

Examination and Treatment

Obviously, whiplash is a condition that is to be taken seriously even when no symptoms are present. Approximately fifty percent of the neck and mid-back complaints treated by chiropractors can be traced to a previous car accident that was undiagnosed, misdiagnosed or mistreated. Chiropractors are specialists in structural and spinal disorders. They are most qualified to perform a comprehensive examination to determine the extent of injury. In the acute stage of injury, treatments should be directed towards reduction of nerve and muscles irritation as well as pain.

In our office this is achieved by using gentle spinal manipulations to restore the restricted motion of the spinal joints. A variety of physiotherapy modalities are employed: ice and/or heat packs; ultra-sound and electro-muscle stimulation; massage therapy. A cervical collar may be needed to prevent the patient from overusing the inflamed neck muscles. Anti-inflammatory supplements such as vitamins A, C, and E; the minerals calcium and magnesium; and herbs such as valerian and passiflora can help reduce neck pain.

After a short period, as pain reduction is achieved, treatments are geared towards increasing range of motion

and correcting structural abnormalities. This is achieved by specific spinal adjustments and corrective rehabilitative stretches and exercises. A special cervical pillow is used at home by the patient to promote the return of the cervical curve.

Insurance and Legal Guidelines

Following the accident, you need to inform your insurance representative immediately. Establish communications between the doctor, insurance agents and yourself as soon as possible. This will prevent any misunderstandings as to the length of time and amount of money toward which health care is allowed.

Get as much information from the other party at the site of the accident. Do not rely solely upon police reports. The police reports are only helpful if you were not responsible for the accident.

Even though you may feel dizzy, nauseous or fatigued after the accident make sure you write down all key information.

You may want to contact an attorney to learn about your legal rights. Some insurance companies may strongly suggest that you seek care with one of their doctors. Usually these physicians treat only with medication and are interested in pain relief only; not spinal correction.

I would like to conclude this article by restating the importance of receiving health care immediately after a car accident. Consider this: if your automobile was involved in the accident you would make sure it was mechanically sound before driving it again, or would have a mechanic check and correct any broken parts or misalignments. Give the same consideration to your body! In case of an accident, have a comprehensive examination by a qualified doctor who can make sure there has been no permanent damage to your spine or spinal nerves.

Whiplash is a condition to be taken seriously, even when no symptoms are present.