



Whiplash of the neck

WHIPLASH is a term generally familiar to most people. It is synonymous with the results of an automobile accident. What is generally not known is that there can be other causes of “Whiplash” injury. Understanding the mechanism, and how “Whiplash” occurs will give us a better insight into why it does happen, and the results of it. You have probably seen whips being used in movies or on television. The whip is brought backward at a slower speed, followed by a sharp quick forward snap at a greater speed. That then is the mechanism of a “Whiplash” injury.

The head, with a weight of up to 14 lbs., rests on the neck that is comprised of 7 cervical vertebrae that are attached to each other by 32 joints, and held together by muscles, ligaments and tendons. Now picture the head as a heavy ball, resting on a freely moving spindle (the neck), that is attached to the body, and what happens when a sharp sudden force is applied to the back of that body. It doesn't take a rocket scientist to see that the head would snap

backward and through the law of physics, would snap forward at an even greater speed. The sudden powerful force of one automobile striking another automobile in the rear end reproduces the “Whiplash” effect, whereby the body remains motionless, the head is thrown backward (hyperextension) and snapped sharply forward (hyperflexion). The head is being thrust forward at a greater speed than the backward thrust, hence the term “Whiplash”.

“Whiplash” could be caused by other means than the classic automobile rear end accident. For example, a sudden sharp blow or push to a persons back can cause a “Whiplash” injury. Strenuous body contact sports, such as football, hockey, wrestling and soccer to name a few can cause this type of injury. A sudden fall forward or backward where the individual tries to counteract the fall, may also be a causative factor.

(Taken from <http://www.doctorexercise.com/journal/whiplash.htm>)

EXERCISES

1 True or false?

- a. Whiplash is the rare result of an automobile accident. T F
- b. Whiplash can be caused by body contact sports. T F
- c. The head has 32 joints. T F
- d. The mechanism that works on the neck during a whiplash injury is similar to that used to snap a whip. T F

2 Complete.

Whiplash is a term that people with car accidents. The name of this comes from the mechanism used in a whip. The head of the, during a car accident, as a whip, but this is not the only way to get a; strenuous body sports, such as football and may cause the same injury.

connect • whiplash • passenger • injury • hockey • contact • behaves • snapping

3 Match questions and answers.

QUESTIONS		ANSWERS	
A	What happens to the neck during a whiplash injury?	1	Strenuous body contact sports, such as football, hockey, wrestling and soccer can all result in whiplash of the neck.
B	Why does the body remain motionless during a car accident?	2	The head, that rests on the neck as it was a ball attached on a spindle, would snap backward and then forward at greater speed.
C	Is there any other possible cause of whiplash, apart from a car accident?	3	Because the person in the car is wearing a seat belt.

A

B

C