

PROTECTIVE EQUIPMENT

Neck Collars – Mouth Guards – Helmets

The purpose of this equipment is to prevent spinal cord injury and not to be used as weapons for the sport. The players need to understand this and realize they can still get injured even with equipment safeguards.

RULES

Players, parents, coaches, referees, and administrators must be aware that catastrophic cervical spine injuries can and do, sometimes occur when collisions take place even while using the proper equipment.

To reduce these risks the following should be checked prior to game time:

1. Inspection for all Mouth Guards.
2. Inspection for all Neck Collars
3. All Helmets worn must be certified
4. Awareness of major penalties for SPEARING

FOLLOW-UP EDUCATIONAL PROGRAM

Data on head and neck injuries in tackle football have been compiled since 1971 by the National Football Head and Neck Injury Registry. A preliminary analysis in 1975 indicated that most of the serious cervical spine injuries were caused by axial loading. Consequently, the leading college and high school athletic associations banned the use of the head as a battering ram ("SPEARING") in blocking and tackling. As a result, total cervical spine injuries and those resulting in quadriplegia declined sharply between 1976 and 1987.

The specific elements of value in controlling the decrease of these injuries are:

1. Coaching Techniques
2. Protective Equipment
3. Rules
4. Awareness

On the basis of these observations, we concluded that individuals that possess the aforementioned characteristics of SPEAR TACKLER'S SPINE be precluded from participation in tackle football and other collision activities such as rugby and ice hockey that expose the cervical spine to axially directed energy inputs. Those individuals in which the normal lordotic curve returns may be considered for return to collision activities if there is no evidence of disc disease or instability.

PROACT TACK...FOR THE EDUCATED GAME!

Prepared by:

Timothy B. Bodzioch, D.C., M. Ed.,
Atlantic Chiropractic Center

Member of the Massachusetts Hockey
and Safety Committee

On staff at Boston Regional Medical Center

President of ProAct Tack Inc.,
200D Main St., Stoneham, MA 02180

ProAct Tack is committed to educating players and coaches with specific information designed and presented to eliminate the risk of spinal cord injuries in the sport of football.

A percentage of revenue from ProAct Tack, Inc. will be donated to the Jason McDonald Fund, and the ProAct Tack Fund to assist football players with spinal injuries.

ProACT TACK
Dr. Timothy Bodzioch, 200D Main Street,
Stoneham, Massachusetts 02180-1619

PROACT
TACK
THE EDUCATED GAME

ProAct Tack is a Service Mark of ProAct Tack, Inc. Copyright © 2012 ProAct Tack, Inc. All rights reserved.

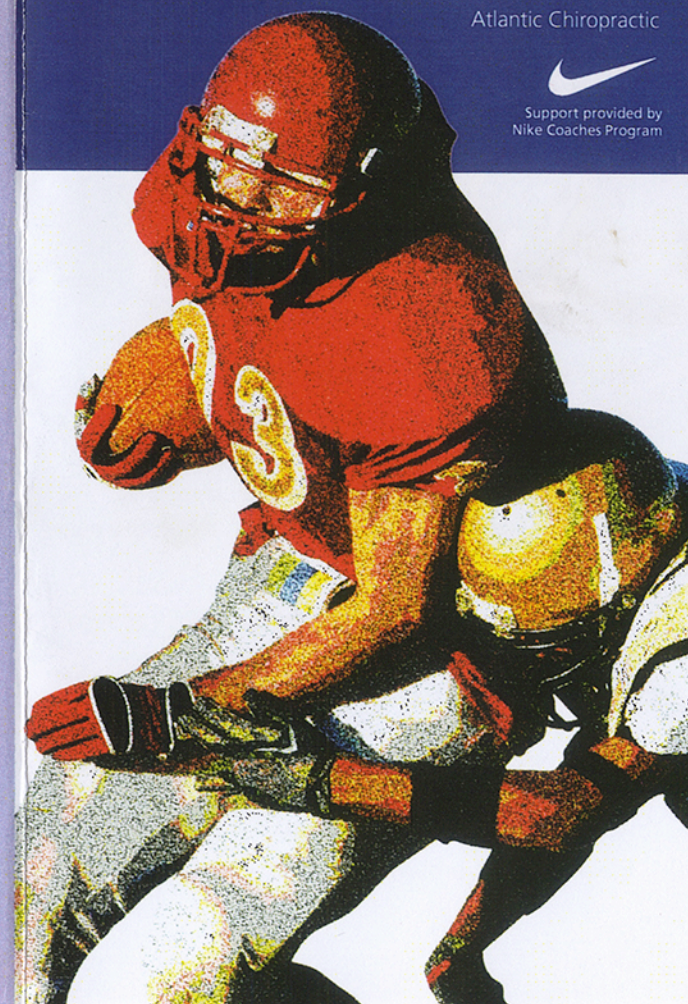
PROACT
TACK
THE EDUCATED GAME

Structure... Function... Performance is vital
to maintain your Educated Game!

Prepared by
Timothy B. Bodzioch, D.C. M. Ed.,
Atlantic Chiropractic



Support provided by
Nike Coaches Program

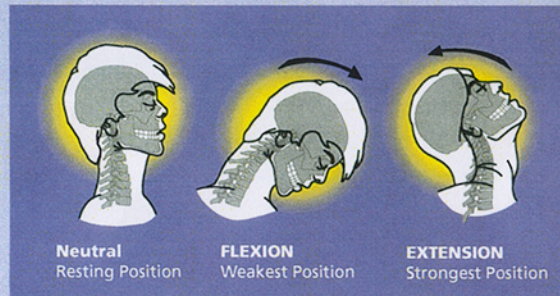


Football

FOOTBALL...described as one of the fastest contact sports in the world. Football injuries can occur, as they often do, between players, helmets, and/or the ground.

Generally reported is an injury of the neck. Most of these injuries take place when a player's head makes contact with other players or is due to a fall from a tackle. These injuries can occur at a full run or walking speed on the field. A player "is most vulnerable when the neck is bent slightly forward (flexed) from its normal position.

Spinal Mechanics of the Neck.



When this happens, the bend (flexion) results in the neck bones (vertebrae) being lined up in a straight line (military position), allowing the squeezing (compressive) force to be spread out along the neck (cervical) bones (vertebrae).

This force is called axial compression, and can result in the breaking (fracture) of one of the cervical bones or subluxation (misalignment of the joints in the neck) of the joints in the spine. When the bone breaks or subluxates, it causes compression on the spinal cord or nerve roots, resulting in paralysis (loss of movement) or abnormal function in the muscles, tissues, and/or organs.

Structure Reflects Function—Help Decrease Spinal Cord Injury

HOW FREQUENT IS THIS INJURY?

There is no evidence narrowing of the cervical spinal canal in itself can influence an individual to permanent neurological injury. However, 4 of the 15 cases identified with SPEAR TACKLER'S SPINE did sustain permanent neurological injury. We believe a major complication is narrowing of the spinal foramina (holes). This injury occurs in this subset as the result of axial compression of a previously injured and persistently straightened cervical spine combined with habitual use of the head impact techniques.

When the neck is flexed approximately 30 degrees, the cervical spine is straight and forms the characteristics of loss of joint motion (segmented column). If loading occurs when the neck is in this position, forces are directed along the cervical spine's longitudinal axis (axial compression), initially causing compressive deformation. If maximum compression is reached and force continues down the longitudinal axis, buckling can occur, resulting in fracture.

We at "ProAct TACK" believe that severe injuries should not occur in the game of football.

Let's Keep It Simple by following these next steps to promote an Educated Game...

EDUCATION – POSITIONING

Players – Skills

The most effective method of eliminating cervical spinal injuries is to first educate the players on positioning their impacts with their overall body. The head should always be protected with a certified helmet.

The impact "PROACT TACK TACK-LIST" is:

1. The head should be extended to absorb the impact.
2. The arms should be raised to absorb the impact.
3. The shoulders should be presented to absorb the impact.
4. The head is up to absorb collision, utilizing the

face mask for impact. (Studies show ten times more tensile strength with curves in spine).

5. Upon impact, arms and/or legs should be relaxed vs stiff to prevent further injury.

Coaches – Techniques

Tackling. A large part of the game of football is tackling, aside from passing, kicking, running, and blocking. Tackling and positioning are synonymous. The purpose of tackling is to stop the flow of the game; NOT to separate the player from the game, or from consciousness! A player must be at the center of gravity... the pelvis for safety's sake.

Tackling with the top of the head (SPEARING) has been responsible for almost 1/3rd of all injuries. Coaches should emphasize the dangers of severe injury when using this technique. Neck strengthening and flexibility exercises are provided by "PROACT TACK-SAFE NECK", and "PROACT TACK-SAFE SPINAL TWIST" to help alleviate such injuries.