



Concussion brochure

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Introduction

Concussions are a common injury in sports. Especially in a (full) contact sport like (Shin) Kyokushin Karate, that allows kicks to the head. A concussion is an injury that can occur, even in a training session. Although a blow to the head might not always give immediate rise to concern, even a mild blow can have serious consequences. It is therefore of importance that coaches and fighters are aware of the immediate and late signs and symptoms of possible brain injury so proper care can be provided to the injured fighter. The medical committee must stress out that this information brochure is just a guideline for ringside evaluation of possible brain injury, and must not be used as a treatment tool. If any of the signs or symptoms are observed or if doubt remains - always contact a physician.

Symptoms of concussion/brain injury

The definition of concussion is a traumatic injury to the brain and may be caused by either direct force (e.g. blow to the head) or an indirect force (e.g. shaking). It is a common misunderstanding that a concussion always causes loss of consciousness. In fact only 5 percent of concussions result in loss of consciousness.

Some **signs and symptoms** of concussion include:

- Feeling like “you had your bell rung”, ‘getting dinged” or “seeing stars”
- Not knowing what happened (little or no memory) just before and/or just after a fall
- Headache
- Loss of balance and/or equilibrium
- Dizziness
- Confusion
- Fuzzy and/or blurry vision
- Poor concentration or inability to carry out a set of simple instructions
- Drowsiness and/or fatigue
- Nausea and/or vomiting
- Poor memory or forgetfulness about “routine” things like “losing” your keys
- Irritability or unusual aggressiveness

Evaluation of possible concussion

Increasing evidence is suggesting that initial signs and symptoms, including loss of consciousness and amnesia, may not be very predictive of the true severity of the injury and the prognosis or outcome. More importance is being assigned to the duration of such symptoms and this, along with data showing symptoms may worsen some time after the head injury, has shifted focus to continued monitoring of the athlete.

This is one reason why these guidelines no longer include an option to return a fighter to a fight even if clear in 15 minutes and why there is no discussion about the “Grade” of the concussion.

When a fighter experiences a blow to the head and the mechanism of injury or the fighter's behavior gives rise to concern a coach/team member can ask themselves these questions to facilitate evaluation.

Are there any medically trained personnel available at the site?

Someone trained in medical procedures almost always has a better view on these matters, so do not hesitate in contacting a physician.

Has the fighter been unconscious or is he/she still unconscious?

Contact a physician! If the fighter still is unconscious, do not move the fighter. If the mouthguard is blocking the airway, try and remove it without moving the head of the fighter. If the fighter is no longer unconscious contact a physician.

*Does the fighter show any of the **signs and symptoms** of concussion in the first 15 minutes after the injury?*

If the fighter shows any of the signs and symptoms that are described above, the fighter should not compete/train again on the same day.

*Are the **signs and symptoms** still there 15 minutes after the head injury?*

If yes: Contact a physician for proper medical evaluation.

If no: the fighter should not compete/train again on the same day. The fighter should be checked every two hours for any recurrence of signs and symptoms. If this means waking the fighter up every two hours, then do so. Continue checking the fighter for 24 hours after the injury.

*There is a recurrence of the **signs and symptoms**, what should I do?*

Contact a physician! In some cases later recurrence of signs and symptoms can be an indication of serious brain damage. When this occurs do not hesitate to contact a physician.