

## SPORTS CONCUSSION: What Every Judo Coach Should Know

by Mark Lonsdale

*Note: The following article is for information only and should not be construed as medical advice.*

Gone are the days when an athlete took a hard hit and the crusty old coach just yelled, “Suck it up!” or “Get over it and get back in the game!” Coaching and sports medicine have both come a long way in the past two decades, driven in no small part by deaths attributed to head injuries and sports related concussions.

We have also learned a thing or two about heat related injuries. Traditionally, in old school judo, we would never allow students to leave the mat during class to get a drink of water. Now, knowing that heat and dehydration has contributed to the death of high school athletes, it is ill-advised to deny any player the opportunity to drink and rehydrate. This is particularly important in the summer; the greatest number of heat-related sports injuries occur in the month of August.

Back to the subject of concussion, and the first question, what is a concussion?

According to medical research, the terms mild brain injury, mild traumatic brain injury (MTBI), mild head injury (MHI), minor head trauma, and concussion may be used interchangeably. Frequently defined as a head injury with a temporary loss of brain function, concussion can cause a variety of physical, cognitive, and emotional symptoms. Of particular concern to football coaches, and often detailed in investigative news reports, are repeated concussions which can cause cumulative brain damage, such as *dementia pugilistica*, or severe complications such as second-impact syndrome. Initial treatment of concussion involves monitoring and rest. Symptoms usually go away entirely within 3 weeks, though they may persist, or complications may occur.<sup>1</sup>

Based on statistical research, over 44% of documented concussions with children are caused by falls; 22% struck by an object; 17% collisions; 11% struck by a person. In the sport of judo, the majority of concussions are caused by hard throws, poor landings, or colliding with another player, wall or object.

In Japan, since 1983, over 110 students aged 12 to 18 have been killed in judo practice in schools; 60% from brain injury. 275 others suffered serious physical injury.<sup>2</sup> In 2011 a Japanese judo instructor was convicted of causing the death of a six-year-old boy, by “continuously slamming him to the ground.” The boy had died the previous year from brain swelling.<sup>3</sup>

By contrast, in a 2011 news report, the head of the French Judo Federation (FFJ), Jean-Luc Rougé, said he had not heard about judo deaths in France, which has the world's largest judoka population of 600,000 – of which 75 percent are children under 14.<sup>4</sup>

The deaths in Japan, versus other countries, is indicative of the “old school” style of judo where too much emphasis is placed on toughening (brutalizing) the students. Here in the United States we

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<sup>1</sup> Wikipedia – Sports Concussions; [http://en.wikipedia.org/wiki/Concussion\\_grading\\_systems](http://en.wikipedia.org/wiki/Concussion_grading_systems)

<sup>2</sup> Japanese Accident Victims Association; <http://judojiko.net/eng/>

<sup>3</sup> AFP Article Japanese judo instructor guilty over child's death, October 5, 2011

<sup>4</sup> China Daily, Judo deaths alarm Japanese parents, January 6, 2011

Additional references: SportsConcussions.org

have adopted a more age-appropriate approach to judo training, where the emphasis with children is on FUN, judo games and recreational fitness. But for senior competitors, the old school training methods and hard randori sessions are still out there.

That said, we still have the not uncommon incident in the dojo where a student takes a hard fall that “rings their bell.” This is often accompanied by a look of shock, closely followed by a quivering lip and a few tears. In most cases the surprise of being thrown is more significant than the actual impact, especially if the mats have adequate cushioning. But instructors need to be careful about dismissing the significance of any hard fall or impact. Only the student knows how hard they hit their head.

For judo, the general recommendation is that if a student or player bangs his or her head, they sit out the rest of the training session. It is best not to send them home immediately, unless the parent chooses to take them to the hospital for evaluation, but to keep them at the dojo and monitor their condition until the end of practice. Continued dizziness, loss of coordination, or vomiting, as examples, would indicate the need for emergency medical care.

Common signs and symptoms of concussion are headaches, dizziness, vomiting, nausea, lack of motor coordination, difficulty balancing, or other problems with movement or sensation. Visual symptoms include light sensitivity, seeing bright lights, blurred vision, and double vision. Tinnitus, or a ringing in the ears, is commonly reported. In one in about seventy concussions, concussive convulsions occur.

Indications that screening for more serious injury is needed include worsening of symptoms such as headache, persistent vomiting, increasing disorientation or a deteriorating level of consciousness, seizures, and unequal pupil size. Unequal pupil size is a sign of a brain injury that is more serious than just a concussion.

A few tips for prevention:

1. Students must be taught to fall correctly, and to keep their head and chin tucked while rolling, falling or being thrown (both left and right side).
2. Students must develop confidence in falling, first onto a crash pad and then onto the mats (tatami).
3. Ensure that there is adequate cushioning in the mats. Sprung floors are nice but not always practical. Add underlay if necessary, especially on concrete floors.
4. When being thrown, breakfalls must become reflexive.
5. Keep in mind that as students progress in judo, their throws become faster and harder, so more experienced students must limit their power when training with novices.
6. Mat areas should not be over-crowded.
7. Some throws and techniques are not suitable for young children.
8. Limit the number of partners doing *randori*.
9. Keep furniture and hard objects away from the mat area.
10. Pad walls, support pillars, and any hard edges.
11. Maintain vigilance and **close supervision**.
12. Have a plan for dealing with an injured or concussed student .

In conclusion, any blow to the head should be taken seriously, but successive blows to the head are extremely serious! After any blow to the head or hard fall, the athlete or player should be immediately removed from the activity, immaterial of player protests. They should sit and rest on

the side of the mat where they can be closely monitored. In more serious cases, they should not be permitted to return to training without a doctor's clearance.

When parents come to pick-up their children, they should be advised to closely monitor their child and seek professional medical advice if any symptoms persist or worsen.

Finally, keep in mind that you are a judo instructor or coach and not a medical professional. Unless you are an MD or Paramedic, you are probably not qualified to render medical assistance beyond the basic Band Aids and CPR (if trained and certified). You shouldn't even recommend over the counter (OTC) drugs such as Aspirin or Advil since the individual may be allergic, and Aspirin is a blood thinner. When in doubt, always recommend a professional medical evaluation and follow up.

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### **Further Comments on Concussions by Joan Love, Editor, Growing Judo**

My own state of Connecticut was one of the first in the nation to adopt a concussion law; Oregon and Washington led the way in 2009. The CT law, passed unanimously in May of 2010, required that all coaches in the public school system (for all sports and at all levels) take a three-hour course in concussions by July of 2010. Following that a refresher course would be mandatory every five years to maintain a coaching permit. The law also states that athletes showing any signs or symptoms of a concussion must be removed from play immediately and are not permitted to return to practices or games until they have received written medical clearance from a qualified medical provider. Any coach who does not adhere to the law may have his/her permit revoked.

Currently, 39 states and the District of Columbia have passed similar concussion legislation; it is pending in a few other states. While most judo programs are not associated with public schools, it would certainly behoove all instructors to become more educated about concussions and the expected protocols where they reside. This topic is also included in the USJA Coaching Certification Course Curriculum.

**There are many excellent websites with detailed information on concussions, including:**

- SportsConcussions.org: <http://www.sportsconcussions.org/ibase/line/>
- The Connecticut Athletic Trainers' Association: <http://www.ctathletictrainers.org/concussion>
- A **FREE Concussions Course** is offered online by NFHS (the National Federation of State High School Associations): <http://www.nfhslearn.com/electiveDetail.aspx?courseID=15000>

**Here are some important points for coaches (and parents!) to keep in mind:**

- Concussions can occur without a direct blow to the head. A jarring impact (as in a hard body hit in football) can also result in a concussion.
- The symptoms for concussions are not always obvious and may not appear until hours or even days after the injury. They can be nebulous and difficult to discern, such as difficulty concentrating, forgetfulness, moodiness and personality changes, feeling sluggish or "down,"

problems with sleep and/or complaining that lights are too bright or noises too loud.  
(*What adolescent does not exhibit these characteristics and behaviors at times?*)

- COMPLETE REST from physical and mental activity is required. This includes non-contact physical activity, schoolwork, television, video games and socializing online or by texting.
- Because the brain is still developing, the risks of long-term (or even permanent) effects of repeated concussions are especially high for children and teens. If symptoms (headache, etc.) appear when moderate physical and/or cognitive activity is resumed, it is a sign that the individual has not fully recovered.
- Concussions must be taken seriously. ***Second Impact Syndrome*** can result from a relatively minor blow if an initial concussion is not completely healed. SIS involves rapid swelling in the brain and typically results in permanent brain damage, if not death. Although it is not common, it is also not predictable.
- Dedicated athletes, especially teens, may not recognize or admit that they have symptoms of a possible concussion injury. Their friends and teammates may be the first ones to notice. If one of your students tells you that, "*Jimmy doesn't seem right,*" take it seriously!