



## **CONCUSSION PROTOCOL**

Although Volleyball, Beach Volleyball & Snow Volleyball is a quite safe sport with only a few severe head injuries, the FIVB developed for its players a concussion Protocol.

Concussion affects athletes at all levels of sport, recreational, elite, in training or in competitions. If managed appropriately most symptoms and signs of concussion are resolved spontaneously. Complications can occur, however, including prolonged duration of symptoms and increased susceptibility to further injury. There is also a growing concern about potential long-term consequences of multiple concussions. Therefore public awareness of concussion is crucial and it is important to diagnose, manage this particular condition promptly, safely and appropriately.

This information has been derived from the recommendations:

*Consensus statement on concussion in sport—the 5th international conference on concussion in sport held in Berlin, October 2016*

### **Signs and symptoms of a concussion may include:**

- Headache or a feeling of pressure in the head.
- Temporary loss of consciousness.
- Confusion or feeling as if in a fog.
- Amnesia surrounding the traumatic event.
- Dizziness or "seeing stars"
- Ringing in the ears.
- Nausea.
- Vomiting.
- Concentration and memory complaints
- Irritability and other personality changes
- Sensitivity to light and noise
- Sleep disturbances
- Psychological adjustment problems and depression
- Disorders of taste and smell

### **What to do?**

Never return to play or vigorous activity while signs or symptoms of a concussion are present.

A player with a suspected concussion should not return to play until he or she has been medically evaluated by a health care professional trained in evaluating and managing concussions.

Children and adolescents should be evaluated by a health care professional trained in evaluating and managing pediatric concussions.

Adult, child and adolescent athletes with a concussion also should not return to play on the same day as the injury.



When the athlete becomes symptom free with a normal neurologic exam, begin the return to sport protocol.

*Graduated return-to-sport (RTS) strategy*

**First 24-48 hours:** SCAT 5 done and athlete is monitored daily at home and at work. Athlete will see our sports medicine physician for an evaluation. SCAT 5 symptoms list will be re-evaluated every day with the athlete to see progression.

**After 48 hours:**

- 1) Symptom-limited activity Daily activities that do not provoke symptoms Gradual reintroduction of work/school activities, phone, computer, video, TV, etc... Also starting mental training...memory, hand/eye coordination, etc...
- 2) Light aerobic exercise: Walking on treadmill, stationary cycling, elliptical at slow to medium pace (55-65% max HR). No resistance training. Monitoring symptoms...would also throw in here body weight activities (squats, lunges, push-ups, burpees. Always monitoring symptoms. Repeat of mental training...increase of amount of time dedicated.
- 3) Sport-specific exercise. No head impact activities. Repeat of 2 but increase the HR and add resistance training in (light to possibly moderate resistance-focus on breathing and not valsalva) sports specific. 65-75% HR
- 4) Non-contact training drills (serve and pass, setting, OOS system setting, controlled defense, transition work with hitting). ImpACT Post Injury Test if this stage goes well. SCAT 5 normalized and ImpACT is normalized to baseline then will progress to next step.
- 5) Full contact practice following medical clearance. Live practice (6 vs 6) will be added to practice and monitored.
- 6) Return to sport Normal game play

**NOTE:** An initial period of 24–48 hours of both relative physical rest and cognitive rest is recommended before beginning the RTS progression.

There should be at least 24 hours (or longer) for each step of the progression. If any symptoms worsen during exercise, the athlete should go back to the previous step.

Resistance training should be added only in the later stages (stage 3 or 4 at the earliest). If symptoms are persistent (eg, more than 10–14 days in adults)