AMA Concussion Policy

Introduction

The welfare and safety of everybody practising Karate is of paramount importance. The AMA is committed to ensuring that its members can enjoy training and competing in Karate safely. One of the most widely recognised benefits of Karate practice is the positive impact it can have on physical and mental health and the AMA recognises its responsibility to minimise the risk of unintended negative health consequences as a result of concussion.

What is Concussion?

Concussion is a brain injury caused by an external force, often an impact. It is not a trivial injury and has potentially significant short term and long term consequences. There is now increasing evidence that, whilst there may be a complete recovery, for many people suffering concussion there may be structural damage to blood vessels, neurons (nerve cells) and glial cells (supporting brain cells).

The brain is increasingly vulnerable following a concussion which can lead to post concussional syndrome, increased likelihood of a second concussion following return to sport, increased risk of catastrophic second impact syndrome following early return and if there are repeated concussions long term chronic traumatic encephalopathy may occur (dementia pugilistica or 'punch drunk' syndrome).

Recognising Concussion

Concussion may occur without loss of consciousness or 'knockout' and can include one or more of the following symptoms:

Physical signs (loss of consciousness, unsteadiness, amnesia);

Cognitive impairment (slowed reaction times, dazed, confused);

Behavioural changes (irritability);

Somatic symptoms (headache), cognitive (feeling like in a fog) and/or emotional symptoms (lability);

Sleep disturbance (insomnia).

The symptoms may recover in 80-90% of people in 7-10 days but this recovery may be longer in children and adolescents. Following full recovery of orientation and new memory formation a post concussional syndrome may exist of irritability, poor short-term memory, fears, sleep disorders, learning difficulties, easy fatigability and headaches. This has significant implications for students of school age especially if facing important academic examinations. The occurrence of a concussion has been documented as a risk factor for further head injuries in both children and adults.

Risk of Concussion in Karate

Karate is structured into three main sections: Kihon (solo techniques), Kata (solo exercises) and Kumite (sparring with an opponent). Each section has a range of complexity to suit the different levels or grades of students. Kumite is introduced as basic blocking and counter-attacking but will progress to free-sparring which develops the timing, reflexes and co-ordination necessary for self defence and competition.

All forms of Kumite, from the most basic pre-arranged exercises to free sparring, require the techniques to be arrested on impact. That is to say that they must be 'pulled' so that only light contact is made. The emphasis of training is therefore on control of techniques and avoidance of dangerous techniques. Whilst injuries and concussion can sometimes occur this is not the aim of training or competition and therefore full contact blows are forbidden. Under AMA competition kumite rules if injury occurs then the competitor delivering the technique is likely to be penalised and possibly disqualified.

Suspected Concussion at KUGB Events

AMA referees should be trained to be aware of the signs and symptoms of concussion and are supported by medical staff at all AMA competitions and dan gradings. In circumstances where a competitor receives a potentially concussive blow to the head medical advice is sought to determine fitness to continue. Because safety is of paramount importance there is a duty to withdraw a competitor from a match if concussion is suspected. This is so despite the fact that the competitor may subsequently receive a clean bill of health following further medical examination.

Managing a Concussion

Most people will make a full recovery from a concussion and will not require any treatment. You should not continue to train or compete following a blow to the head if you experience any symptoms of concussion.

You should be seen by a doctor if you have:

- been knocked out but have now woken up;
- vomited since the injury;
- a headache that does not go away with painkillers;
- a change in behaviour, like being more irritable or losing interest in things around you;
- been crying more than usual (especially in young children);
- problems with memory;
- a blood clotting disorder (like haemophilia) or you take medicine to thin your blood;
- had brain surgery in the past.

If your injury was not serious enough for you to see a doctor you may take the following action:

- hold an ice pack (or a bag of frozen peas in a tea towel) to the area regularly for short periods in the first few days to bring down any swelling;
- rest and avoid stress;
- take paracetamol or ibuprofen to relieve pain or a headache;
- make sure an adult stays with you or your child for at least the first 24 hours.

Do **not** do any of the following:

- do not go back to work or school until you're feeling better;
- do not drive until you feel you have fully recovered;
- do not play contact sports for at least 3 weeks – children should avoid rough play for a few days;
- do not take drugs or drink alcohol until you're feeling better;
- do not take sleeping pills while you're recovering unless a doctor advises you to.

See your doctor if:

- your symptoms last more than 2 weeks;
- you're not sure if it's safe for you to drive or return to work, school or sports.

The matter should be treated as an emergency and 999 called where you have:

- been knocked out and have not woken up;
- difficulty staying awake or keeping your eyes open;
- a fit (seizure);
- problems with vision or hearing;
- a black eye without direct injury to the eye;
- clear fluid coming from your ears or nose;
- bleeding from your ears or bruising behind your ears;
- numbness or weakness in part of your body;
- problems with walking, balance, understanding, speaking or writing;
- a dent to your head;

Returning to Karate

Your return to your normal karate training regime, intensity and methods and/or karate competition must be phased in accordance with the timeframes set out below:

Phase 1	**Day 0 – Day 2**	Complete rest for 2 days from your injury or longer if symptoms persist.
Phase 2	**Day 2 – Day 16**	Relative rest for a further 14 days. Return to daily activities that do not involve a risk of further head injury and avoid prolonged reading and use of television, computer, video games and smart phones. If symptoms return, reduce activity levels.
Phase 3	**Day 16 Onwards**	If symptom free reintroduce exercise such as walking or gentle jogging gradually. If an activity triggers symptoms that is a sign that you are not yet ready to progress to this stage and should return to the previous one. Increase the intensity as appropriate every 1 – 2 days. Karate training should initially be light. You should avoid any forms of training where there is a foreseeable risk of further injury. Gradually return to normal karate training intensity but continue to avoid any forms of karate training where there is a foreseeable risk of further injury. Kumite training must not include the head as a target or any sweeps/throws.
Medical Review	**Before Phase 4**	You should be reviewed by a doctor before returning to training or competition where there is a foreseeable risk of head injury. The doctor's role is to ensure that you are following a graduated return to training and are symptom free.
Phase 4	**Not Before Day 19 (Adults)** **Not Before Day 23 (Children)**	Return to your normal karate training regime, intensity and methods. If symptoms are triggered that is a sign that you are not yet ready to progress to this stage and should return to the previous one.
Phase 5	**Not Before Day 21 (Adults)** **Not Before Day 28 (Children)**	Return to competition when fully fit and after an appropriate period of your normal karate training regime, intensity and methods.