

Extract from L3 Manual:

Unit 10: - Injuries in Kendo

Injuries in Kendo are comparatively rare in relation to other contact sports, however the instructor still has a responsibility to work to prevent and minimize them. The instructor is required to have an understanding of the mechanisms of injury production, the methods by which injury can be reduced and the basic principles of injury management. All levels of instructor should acquire and maintain a First Aid qualification.

Prevention of Injury

The first stage of managing injuries is prevention. To this end the issue of safety in the dojo needs to be understood by the instructor and transmitted to the students.

Dojo safety can be broken down into four areas: -

1. Dojo environment - Dojo floor should be clean, sound, and free of obstructions, splinters, nails, etc. There should be no items of equipment lying around the walls that could interfere with the safety of training. Adequate lighting and ventilation are also necessary. Dojo surrounds and floor should be checked for hazards and the floor cleaned before each training session.
2. Equipment - Students should be carefully instructed on the correct method of wearing bogu, and caring for and repairing bogu and shinai. Students should be trained to check shinais regularly for damage or wear, and what to look for.
3. Students' health and fitness - students should be encouraged to monitor their own health and fitness, and instructed in the correct methods and importance of warm-up, warm down, injury management, recovery, rest, nutrition and fluid intake. The instructor should observe class closely, especially during hard training sessions, for any signs of injury or excessive fatigue.
4. Students' actions – The instructor is responsible for ensuring that students are acting safely at all times. Correct technique and accurate striking reduce the chance of injury, and students should understand that to act outside the control of the instructor is potentially dangerous. A strong framework of courtesy and etiquette ensuring that training is conducted in an atmosphere of mutual respect will also help to minimize injury.

Classification and Causes of Injury: -

A study of Kendo injuries in published in the 1980 edition of “Kendo Jiten” produced the following table: -

Callus or blister	78.9%
Elbow swelling and pain	5.6%
Split eardrum	4.4%
Jammed finger	3.7%

Other(concussion, snapped Achilles tendon etc.)	7.4%
Total	100.0%

Generally the causes of injury can be classified in the following way: -

- Due to external forces
- Due to internal forces
- Due to overuse

External injuries in Kendo may be caused by impact of shinai, contact with the opponent's body, and/or impact of external environment (dojo).

The great majority are caused by the impact of the shinai as a result of inaccurate or poorly executed cuts. Jammed fingers, bruised elbows or even split ear drums or concussion can be the results. Rough, one handed circular swings are particularly dangerous and should not be allowed.

If a student is knocked over by strong tai-atari, the impact of the back of the head on the floor or against a wall may cause concussion.

Clashes of opponents' feet during simultaneous attacks are possible, leading to bruised or even broken toes. Cuts caused by toenails can also occur, and may lead to infection.

Internal forces generated by unaccustomed, incorrect or forced action can cause a variety of injuries including strained or torn calf muscle, torn or snapped Achilles tendon, bruised right heel, and injuries to lower back, hip and knee. Inadequate fitness or insufficient warm up can contribute to some of these injuries.

Overuse or excessive repetition can also cause joint pain while excessive fatigue or overtraining will increase the chance of other injuries occurring.

Blisters of hands and feet caused by overuse and incorrect technique are common problems for both beginners and more experienced players.

To prevent or reduce all of these injuries, the correct way of holding the shinai, correct footwork, correct cutting with correct posture is essential.

While not injuries as such, heat exhaustion and dehydration are dangers that must be considered particularly during hot weather.

Treatment and Management of Injuries

First aid is a specialized topic, and as mentioned above the instructor should acquire, maintain and update a current qualification in this field. Some principles and examples will be mentioned here.

When an injury occurs, it should be carefully evaluated so that the correct treatment can be carried out. The injured person should stop training, and if necessary the class

should also stop so that this can take place. If possible patient should be moved from training area to more suitable place, but patient must not be moved until instructor is sure that no further damage will result

The instructor should be aware of the principles of the immediate management of serious situations such as unconsciousness, shock, concussion, fractures, serious joint or tendon damage, heat exhaustion, haemorrhage or cardiac arrest. Professional medical attention must be obtained as soon as possible in such cases.

For most bruises and sprains the Ice, Compression, Elevation and Rest (I C E R) regime will minimize damage and reduce recovery time. If there is any doubt about the extent of the injury, the injured person should seek qualified medical advice.

In the case of blisters and minor cuts to the feet reducing the chance of infection by thorough cleaning and sterile dressing is important.

For injuries caused by overuse or incorrect technique, the training regime should be modified while injury recovers and technique is corrected. For example person with bruised heel should refrain from fumikomiashi training and spend more time on soft footwork training such as hiki-waza. Stretching of the arch of the foot and flexibility of the toes and ankle will reduce the chance of such injury recurring.

A well stocked first aid kit, list of phone numbers of ambulance and nearest hospital, and an injury management plan are all part of the preparation for adequate injury management.

The instructor should check the injured student's treatment and recovery, and the return to training should be controlled until the instructor is confident that recovery is complete, and that full training can be resumed without further damage.

The role of the instructor in management of sports injury is summarized as follows: -

- Demand all injuries and illness be reported.
- Insist on qualified advice
- Ensure prescribed treatment is followed.
- Obey medical restriction of injury.
- Maintain fitness of uninjured regions.
- Prohibit return until recovery
- Correct injury-labile weaknesses and techniques

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