Host Recovery Procedure for Players and Umpires
European Championship Guidelines

Introduction

During the NE Council meeting June 07, this topic was discussed by all members in the context of NE champs and it was agreed that the host country would accept the responsibility for meeting these guidelines.

Minimum Requirements for Recovery

1. **Cool Down & Refuelling within 30 mins**
    a) This is not always possible with the championship programme; the host country needs to ensure that the manager is aware of alternative space (not changing rooms) for cool down and refuelling.
2. **Ice Recovery – After Match within 60 minutes of its finish**
    a) Changing Area with floor drainage which needs to be large enough to allow for an ice bath to be placed on the floor. If an ice bath is not available, then other vessels for the water and ice will be required.
    b) One ice bath per changing room
    c) Hose pipe
    d) Cool-box for ice storage courtside
    e) Chest freezer – for ice storage
    f) Each ice bath will require between 12-18 bags of ice (30 kg)
    g) Cleaning equipment
3. **Ice Recovery – After Match within 60 minutes of its finish**
    a) Notification to hosts and Competition Manager before event (see Ground Transport-Training-Ice-Water Requests document).
4. **Ice Recovery for Umpires**
    a) Changing room space
    b) Large buckets/dustbins
    c) Cool-box and ice

Ice Bath Procedures

1. **Explanation and Consent**

The athlete must be provided with a full and clear explanation of the ice bath that should include:

    a) A description of the facility
    b) Clinical reasoning for the use of cryotherapy

Following clarification of the proposed session(s), the patient's verbal consent to cryotherapy must be obtained and then recorded.

2. **Safety and Hygiene**

a) Staff will maintain the hygiene of the unit in line with manufacturer's instructions if utilising a system designed for this purpose. Under no circumstances should athletes add any chemicals or products to the water.

b) No unaccompanied access to the ice bath is allowed. A minimum of two athletes must arrange to use the bath together or an individual athlete must be supervised throughout the session.

c) All athletes must shower immediately prior to using the facility.

d) Users must be wearing appropriate swimwear in order to use the ice bath.

e) No footwear to be worn in the ice bath.

f) The air temperature where the ice baths are should be monitored so it is not too cold.

g) Participating squads should add their own ice when they come to use it. Approx. 30 kg is provided per squad.

h) All users must take care when entering and exiting the facility since surfaces may be slippery.

i) If an athlete has a cut or infection of any kind, they must seek a medical opinion before using the ice bath. All grazes, skin abrasions must be covered with a waterproof dressing and the athlete should be the last to use the ice bath.

j) Ice baths should be emptied after each session and then cleaned with disinfectant and refilled prior to the next session. A minimum of 2 members of staff should be available to complete this task due to the weight and volume of water involved.

k) Ice baths should not be left filled overnight.

3. **Explanation and Consent**

The information below provides a general guide to the contraindications to ice and when ice should only be used with appropriate precautions.

A mandatory warning should be given that treatment can give rise to initial pain.

Contraindications

- Circulatory insufficiency / peripheral vascular disease
- Exacerbation of existing conditions with known accepted risks including acute infective or inflammatory conditions; skin disorders such as eczema and dermatitis; areas of increased fluid tension; regions treated within 3-6 months by radiotherapy; haemorrhagic conditions and severe organ states such as cardiac failure
- Acute febrile illness
- Vasospasm (e.g Raynauds disease / development of white/blue fingers with cold)
- Cryoglobulinaemia
- Cold urticaria / allergy
- Epilepsy
- Chlorine allergy
- Being under the influence of drugs or alcohol

Precautions

- Inability to communicate
- Sensory loss (abnormal or altered skin sensation)
- Open wounds, infected tissue and skin lesions
- Asthma

4. Modality Specific Information

The target temperature is a reduction of around 5-15°C; however, temperature changes in the tissues will depend on the amount of heat energy removed from the tissues and the rate of removal.

For a constant source of cooling the temperature drop in the tissues will depend on:

a) The temperature difference between the water and the tissues: the colder the water, the greater heat loss from the tissues.

b) The thermal conductivity of the tissues. This differs from one area to another. In general, water-filled tissues such as muscle have a high thermal conductivity compared to fat or skin. Thus the cooling of deep tissue depends on the nature of the overlying tissue. The normal layer of subcutaneous fat serves as thermal insulation so that heat loss through the tissues - or cold penetrating the tissues (which is the same thing) – is largely dependent on the blood flow.

c) The length of time for which the cold is applied. The amount of energy loss is clearly dependent on time - temperature falls until energy lost at the surface is balanced by heat energy supplied from the rest of the body, at which point the temperature becomes constant.

d) The size of the area that is being cooled. The larger the area, the more heat energy is lost.

While the skin temperature can be changed abruptly and markedly with the application of cold, the deeper tissues are cooled much less and much more slowly.

5. Recommendations / Considerations for Treatment

The following table provides some guidelines for treatment times but it must be recognised that each individual will have his/her own cold threshold.

Injury / Diagnosis	Duration (minutes)	# of sessions per week	Comments
Acute hamstring strain	5	3	Lower limb immersion
Post training recovery session	5-10	1-2	Waist high immersion Concomitant simple lower limb exercises
Acute ankle sprain	3 minutes x 3 (total 9)	3	Immersion up to mid calf

Injury / Diagnosis	Duration (minutes)	# of sessions per week	Comments
Muscle contusion	5	3	Lower limb immersion Static quadriceps exercises and gentle range of movement exercises
Acute medial ligament strain of the knee	1 minute x 5 (total 5)	2	Lower limb immersion Knee exercises in between immersions – static quads strengthening, ROM
Quadriceps muscle tear	5-8	2-3	Lower limb immersion
Medial tibial stress syndrome	3 minutes x 3 (total 9)	5	Lower limb immersion
Calf strain	3 minutes x 3 (total 9)	2	Immersion up to knee level
Turf toe (1st MTP joint sprain)	1 minute x 3 (total 3)	10 (treatment twice per day)	Immersion up to mid foot

At temperatures around 10-12°C continuous immersion can usually be tolerated for 6-8 minutes. Since continuous immersion is often uncomfortable, intermittent immersion may often be more appropriate for 1-2 minutes at a time.

It is not recommended that athletes should exceed 10 minutes.

The temperature of the water in the ice bath

Athletes should not rush to take a warm shower immediately after using the ice bath. The residual cooling effect and then gradual warming is recommended.