CRAMPING

INTRODUCTION - WHAT IS CRAMPING

Cramping is one of the most commonly experienced conditions on the sports and is experienced by athletes worldwide. Cramps are sudden, painful, involuntary muscle contractions. Various types of cramping occur including exercise-associated cramping, protective muscle spasm, resting cramps, tetany and contractures. For the purpose of this article we will focus on exercise-associated muscle cramping.

CAUSES / WHY DOES IT HAPPEN?

Although the condition is very common very little is known about how and why cramps occur. Two primary factors are believed to contribute to cramping:
1 Electrolyte depletion and dehydration
2 Fatigue

Electrolyte depletion and Dehydration - Low potassium or sodium

As you exercise you sweat losing fluids and salts (sodium). If you exercise for long periods without replacing the lost fluids and sodium, depletion of muscle stocks can occur. This contributes to cramping.

Muscle Fatigue (Altered neuromuscular control)

- Factors contributing to muscle fatigue include: exercising in hot and humid conditions
- High exercise intensity
- Prolonged exercise duration
- Depletion of muscle energy stores
- Poor conditioning (Poor fitness)

SIGNS AND SYMPTOMS

- Firm muscle: Cramping muscle is tight and hard to the touch
- Pain: The intensity of pain can vary from very mild to debilitating [ie you cannot continue the activity]
- Twitching: Effected fibres in the cramping muscle may twitch and ripple
- Duration: Cramps may last from 10 seconds up to 15 minutes or more

WHAT CAN I DO? (HOME AND FIELD-SIDE TREATMENT)

- **Stop** doing the activity that has caused the cramping
- **Stretch** the muscle that is cramping and maintain the stretch until the cramp eases
- **Icing Massage**: applying ice to muscle during or after cramping may reduce pain associated with cramping

HOW DO I PREVENT IT HAPPENING AGAIN?

- Increase your overall level of conditioning [ie get fitter]
- Decrease the duration of exercise
- Decrease the intensity of exercise
- Improve the muscles flexibility through stretching
- All equipment must be specific to your requirements eg. Racquet, bat or club weight and length, grip size, bicycle adjustments and correct supportive footwear
- Correct technique and coaching are important to prevent overusing muscles inappropriately
- Rehydrate when exercising. For exercise durations of 60 – 90 min water alone will be sufficient. For exercise duration of longer than 90min carbohydrate and electrolyte replacement become important.

References

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