

Management Protocol of Ankle Sprain

Introduction

Ankle joint is the joint linking the foot and the leg which was bounded by the strong deltoid ligament over the medial side and three major ligaments over the lateral side. Ankle sprain is an acute injury to one or more ligaments of the ankle after “twisting the ankle”. The severity depends to the degree and the number of ligaments torn.

Symptoms

- Pain (usually over the lateral side of the ankle)
- Swelling
- Bruise
- Reduced range of motion
- Difficulty in walking
- Recurrent ankle sprain or instability

Diagnosis

The attending doctor will do a physical examination on the injured ankle, look for the bruise, swelling and soft tissue condition of the ankle. He will palpate for the local tender spot and screen for other possible injuries such as ankle fracture, ankle syndesmosis injury, osteochondral injury etc. Depending on the clinical condition, further investigation including x-ray, computer tomography (CT) and magnetic resonance imaging (MRI) may be required.

Treatment

After the acute ankle sprain, immediate treatment should be started. “R.I.C.E” therapy is the first aid treatment of acute injury which included:

- Rest: avoid too much activity of the injured ankle
- Ice: Ice therapy can be administered to control the swelling and inflammation of the injured part.
- Compression: Local bandaging can be applied to reduce the soft tissue swelling.
- Elevation: Elevate the injured limb above the heart can improve the local edema and swelling of the injured part.

Depends on the severity, the doctor may suggest you to use an ankle brace, putting on a cast or bandaging. You may be asked to have protected weight bearing walking by using a stick or crutches for short period of time. You may be prescribed some non-steroidal anti-inflammatory drugs or analgesics to reduce the pain and inflammation. Finally, you will be referred to a physiotherapist for rehabilitation which included local treatment for the pain and swelling, restoration of ankle motion, mobilization and proprioception training, etc. Most of the ankle sprain can be treated successfully by non-operative treatment. Surgery such as ankle arthroscopy or ligament reconstruction may be required for recurrent ankle instability, persistent pain or other associated lesion.

Prevention:

- Warm up and stretching exercise before sports activities.
- Wear suitable shoes.
- Pay attention to the ground during your walking, running and hiking.
- Suitable muscle and proprioception training.

If you have further enquiry, please consult your doctors or physiotherapist.