

# Sprained Ankle and Management

## Injury sustained

Sprain injury of a joint is resulted from abnormal or excessive movement of the joint causing its ligament to be incompletely or completely torn (ruptured). The joint will be swollen with pain and bruises. Ankle, knee and wrist are the commonest joints involved in sprain injuries.

## Signs and Symptoms

1. **Pain** : The area of injury will be very painful especially during movement and weight bearing.
2. **Swelling and bruises** : Injury to the underlying blood vessels will cause swelling and discolouration of the skin.

## Pain Management

Analgesics may be taken as advised by the doctor.

## Care of Sprained Ankle

### A. Rest

**Rationale** : Rest can promote healing and prevent further injury.

- Rest the injured limb for 48 hours after injury. Gentle movement may be started after 48 hours and progress according to tolerance of the patient. Stop if pain increases again. Protected weight bearing may be allowed if attending doctor considers serious tear of ligaments has not taken place.

### B. Elevation of Injured Limb

**Rationale** : To control swelling.

- The injured limb should rest in an elevated position most comfortable to the patient. One to two pillows can be used to elevate the injured limb while sitting or lying down to prevent swelling.

### C. Cold Therapy

**Rationale** : Cold therapy can cause vasoconstriction and help to decrease swelling, muscle-spasms and pain.

- The principle can be applied by different means for periods of 15-20 minutes every 2-4 hours during the acute stage.
- Cold compress can be applied by wrapping the injured limb with ice pack covered by a towel in elevated position. Ice should NOT be applied directly onto the limbs.

### D. Immobilization

**Rationale** : To rest the injured joint and prevent continual swelling and further injury.

- Crepe bandage or tubigrip (double up) can be used to support the injured part.
- The distal end should be exposed for observation.
- The bandage or tubigrip should be checked periodically. When it is too loose, the bandage or tubigrip cannot function properly. When it is too tight, circulation to the limb will be impeded.
- Tubigrip can be washed at home with liquid detergent in 40°C warm water and laid flat to dry after rinse.



Source of picture : Emergency Care Handbook, the Auxiliary Medical Service of Hong Kong

- The bandage or tubigrip should be removed under the following conditions :
  - (a) Numbness or paresthesia of the injured limb
  - (b) Increasing pain of the injured limb
  - (c) Swelling subsided
  - (d) Night time while sleeping

## Medical advice should be sought in the following situations

The swelling and pain will usually subside after 2-3 weeks. If the following situations occur, medical advice should be sought from the A&E Department or a family doctor :

1. The injured limb has increased pallor, numbness or burning sensation.
2. The joint is increasingly painful and movement is even more restricted a few days after injury.

❖ The above information is for general reference only ❖