# **Work-related disease series** Shoulder **Tendonitis**

#### Introduction



Work and health are closely related.

While our work could affect our health, our health could also affect our work.

According to the International Labour Organization, the relationship between work and disease can be classified into the following three categories:

- (1) Occupational diseases have specific or strong relationship to the exposure to physical, chemical, biological or psychosocial factors in the workplace. These factors in the work environment are predominant and essential in the causation of the diseases, for example, silicosis, asbestosis, occupational deafness, etc.
- (2) Work-related diseases are multifactorial in origin, where factors in the work environment may play a role, together with other risk factors, in the development of such diseases, for example, plantar fasciitis, osteoarthritis of knee, shoulder tendonitis, etc.
- (3) General diseases are diseases affecting the working population. They do not have causal relationship with work but may be aggravated by occupational health hazards, for example, diabetes mellitus, gout, rheumatoid arthritis, etc.

This pamphlet introduces shoulder tendonitis which is a common "work-related disease".







### What is

## shoulder tendonitis?

The shoulder joint is encircled by muscles, tendons, ligaments and bursae. Shoulder tendonitis is an inflammation of the tendons around the shoulder joint (including the rotator cuff and biceps tendon) as a result of injury, overuse or other factors.

#### Causes

The exact causes of shoulder tendonitis are not completely known, but there are certain risk factors for the disease, including:

- Wear and tear and degeneration of tendons during the ageing process
- Overuse of tendons around the shoulder joint, for example:
  - Raising the arm forward or outward repeatedly
  - Holding the arm in a raised position



- Previous trauma or surgical operation to shoulder
- Other factors, such as diabetes mellitus, thyroid dysfunction, etc.

#### Signs and Symptoms

- > Shoulder pain, which can deter one from sleeping on the affected side
- Restricted shoulder movements which, if serious, may even affect daily living and work performance

#### Which occupations have a higher risk?

- Welder the arm holding the welding gun is often kept in a raised position
- Cleansing worker the arm is raised outward repeatedly while performing window cleaning
- Painter the arm holding the brush is frequently maintained in an overhead position when painting the ceiling
- Stock keeper the arms are raised forward and outward repeatedly when handling goods on the racks



#### How\_

# to prevent it?

# 1. Avoid raising the arms forward or outward repeatedly

- Modify the work process and work station design, for example
  - Place frequently used objects or tools at a level of easy reach so that the arms are kept close to the body
  - Arrange rest breaks or change working postures periodically to rest the shoulder joints and their surrounding tendons





- Use suitable aids at work, such as
  - Stable footstep for reaching objects placed at a high level
  - Long-handle paintbrush to reduce forward and outward raising of the arm

#### 2. Reduce stress on the shoulder joint

- Minimize the force exerted in manual lifting, for example
  - Adopt team lifting
  - Use trolley or other manual handling aids
  - Use suitable and light-weight hand-held tools



#### 3. Exercises

#### First series • • >

- 1 Lean the body forward and hold onto a stable piece of furniture with the right arm. Hang the left arm freely and perform rotary movements 10 times.
- Repeat the rotary movements in opposite direction 10 times.
- Repeat the above set of movements with the right arm.



#### Second series

- 1 Stand at a distance of 30 centimeters away from the wall with the right hand on the wall.
- 2 Move the right hand upward and simultaneously lean the body onto the wall gradually until a stretch in the shoulder or armpit is felt. Hold for 10 seconds and then return to the starting posture. Repeat the movements 10 times.
- Perform similar movements on the left side.

#### Third series • • >

- 1 Grasp one end of a bath towel with the right hand. Place the towel behind your back. Use the left hand to grasp the lower end.
- Use the right hand to pull the towel up gradually to elevate the left arm until a stretch in left shoulder is felt, then return to the starting posture. Repeat the same movements 10 times.
- 3 Change hands and repeat the above set of movements.



# 4. Healthy Lifestyle

➤ Adequate rest and sleep ➤ Regular exercise ➤ Balanced diet

# **How**

#### to treat it?

- Reduce shoulder joint exertion apart from suitable exercises, avoid using the affected arm to lift heavy objects or over-exerting the shoulder joint.
  - Heat or cold application relieve pain
    - Medications can use oral, topical and injectable local analgesics.
      - Physiotherapy such as ultrasound therapy, infrared treatment and rehabilitation exercises, etc
      - Surgery operation may be required in severe cases.

# Conclusion

Shoulder tendonitis is a "work-related disease". Although work is only one of the many risk factors in the development of the disease, the chance of getting this disease can be minimized by eliminating the health hazards at work or reducing their risks, and adopting appropriate preventive measures.

# **Enquiry Service**

For enquiries on this pamphlet or advice on occupational health and hygiene matters, please contact the Occupational Safety and Health Branch through:

Telephone: 2852 4041 Fax: 2581 2049

E-mail : enquiry@labour.gov.hk

Information on the services offered by the Labour Department and on major labour legislation can also be found on our website http://www.labour.gov.hk.

#### Complaints

If you have any complaints about unsafe workplaces and practices, please call the Labour Department's occupational safety and health complaint hotline at 2542 2172.