

Occupational Overuse Syndrome

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Occupational Overuse Syndrome

- OOS, RSI,CTD
- is an umbrella term for a range of pain conditions characterised by discomfort or persistent pain in muscles, tendons, nerves and soft tissues.

Pain disorder to be classified as OOS:-

- It must be caused by or significantly contributed to by occupational factors, including:
 - prolonged muscle tension,
 - repetitive action,
 - forceful movements,
 - sustained or constrained postures,
- which exceed the usual ability of the body to rapidly recover.

OOS

Localised Inflammations

- Trigger finger
- De Quirvaines Tenosynovitis
- Epicondylitis

- Cervicothoracic dysfunction
- Postural Dysfunctions

Compression Syndromes

- Carpal tunnel Syndrome
- Thoracic Outlet syndrome
- Ulna and Radial Nerve Compressions

Pain Syndromes

- Chronic Pain Syndrome
- Fibromyalgia

- Complex Regional Pain Syndromes –I, & II

Types of Symptoms

- Muscle discomfort, tightness or perceived weakness
- Fatigue
- Stiffness
- Burning
- Numbness or tingling

- Overuse Symptoms can be distinguished from the pains of normal life by their persistence and severity, and their associations with work activity.

Early Warning Symptoms

- Discomfort during work hours,
- Disappears over night
- Indicates muscle fatigue rather than OOS
- Can develop into OOS.

Moderate Symptoms

- Aching and tiredness which occur increasingly early in the work shift and persist.
- Fail to settle overnight
- Settle at weekends
- Often will persist for months.

Severe Symptoms

- Pain persistent at rest and sleep disrupted
- Light, non-repetitive work causes pain
- ADL's affected
- Physical signs present eg muscle weakness
- May persist for months or years.

Theoretical Causes of Pain

- Prolonged muscle tension
- Mechanical Irritation
- Neural Irritation

Factors Contributing to OOS development

- work organisation
- awkward postures
- lack of variety in work
- static loading - constant
- forceful movements
- stress

Factors contributing to OOS

- excessive work rates
- lack of rest breaks
- lack of micropauses
- poor ergonomics, ie work station layout
- psychological and behavioural characteristics of the individual

Things that cause Stress

- Heavy work loads
- Deadlines
- Bad interpersonal relationships
- Changes in the work place
- New technology
- External factors to the work place

How to help Stress

- Relaxation
- exercise
- healthy lifestyle - food and social interactions
- find someone to share problems with - if necessary a psychiatrist

Fatigue and Recovery

- Preventing OOS is about balancing fatigue and recovery
- We want to reduce fatigue and improve recovery

Ways to Improve your recovery at Work

- Working in as relaxed a way as possible
- Work variety
- Postural changes
- Micropauses – 3 sec breaks every 3 minutes
- Reduce emotional tension and stress through relaxation techniques
- Doing stretching exercises
- Appropriate organisation of your work station

After work –what do you do?

- What you do after work affects your ability to recover in each 24 hour cycle.
- Do you do similar activities at home as at work? Will it add to your fatigue? Do you take breaks and vary activities?
- Sleep and Physical fitness??
- Stress at home and in relationships can affect your ability to recover from muscle fatigue.

Micropauses

- Resting to prevent fatigue is much more efficient than resting to recover from it.
- Micropauses use just over 1 minute per hour, much less time than taking full rest breaks.
- Active or passive

Posture

- Standing and sitting posture important
- Must be related to activity at work
- Power chain theory
- **Respect the three spinal curves**

Work Station

- Aim to work in as relaxed a way as possible.
- Equipment should allow for people of different sizes.
- Aim for muscles and joints to be free from strain.
- Important to still take regular breaks and change posture regularly.

Work Station Layout

- Screen height – head, neck, eyes
- Back support
- Mouse and keyboard position
- Leg support
- Shoulders, elbows, wrists – positions
- Where is the phone?
- How much do you use it?
- Do you need your hands free?

Exercises

- Aim to try to take joints through a full ROM
- Emphasis on directions that are opposite to the most endured position – eg finger flexion on the keyboard, - work on extension of fingers.
- Over-pressure risky without individual guidance

Time for Help?

- Seek assistance in the early stages of pain symptoms ie when discomfort during work hours is becoming troublesome, but completely resolves overnight.
- Assessment and specific exercises early can correct problems.
- Treatment is very difficult when the referral is not until symptoms are severe and continuous.

Education

- Patient education+++++

Self management:

1. Recognise early sign
2. Micropauses
3. postures, exercise, de - stress methods
4. Seeks medical attention if unable to manage.

aknowledgement

Sarah Waldin