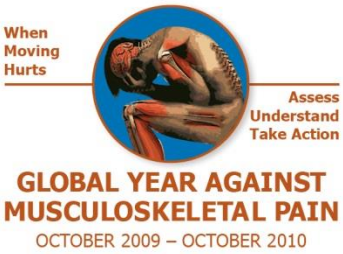

• **FACT SHEET No. 18**

Neck Pain

Introduction

Neck pain is a common global problem, at least in the industrialized world, and it constitutes an important cause of disability. The functional task of the cervical spine is to control head movements in relation to the rest of the body. Since the eyes and the vestibular organs are located in the head, information from mechanoreceptors in the structures of the neck is crucial for interpreting vestibular information and for controlling motor tasks that rely on visual information. Neck pain may therefore also have substantial functional consequences.

Epidemiology and Economics

- Neck pain affects 30–50% of the general population annually.
- 15% of the general population will experience chronic neck pain (>3 months) at some point in their lives.
- 11–14% of the working population will annually experience activity limitations due to neck pain.
- Prevalence peaks at middle age, and women are more often affected than men.
- Risk factors with strong evidence include high physical job demands, low social support, smoking and history of low back pain or neck injury. There is limited evidence that several other physical and psychological factors such as repetitive work, prolonged periods of neck flexion and psychological and emotional symptoms constitute risks.

Pathophysiology

The pathophysiology for the majority of neck pain disorders is not clarified. There is evidence for disturbed oxidative metabolism and elevated levels of pain-generating substances in neck muscles, suggesting that impaired local muscle circulation or metabolism can be part of the pathophysiology.

Neck pain is also associated with altered coordination of cervical muscles and impaired proprioception in the neck. Evidence suggests that these phenomena are caused by the pain, but also that they may aggravate the condition.

IASP brings together scientists, clinicians, health-care providers, and policymakers to stimulate and support the study of pain and translate that knowledge into improved pain relief worldwide.

For neck pain with post-traumatic onset, soft-tissue injury can impair information from mechanoreceptors in the injured tissues, which can cause sensory and motor dysfunctions.

Clinical Features

- Neck pain disorders develop gradually or have a post-traumatic onset.
- Recurrent episodes are common.
- Clinical symptoms associated with neck pain are: pain and stiffness in the neck, headache, dizziness, and radiating pain to shoulders and the upper limbs.
- Neck pain with post-traumatic onset is associated with a wider range of symptoms including temporomandibular symptoms, visual and auditory disturbances, sleeping problems, and cognitive and emotional problems.
- Clinical findings associated with neck pain are: decreased range of cervical movement, increased fatigability, and decreased pressure pain thresholds of cervical muscles.
- Comorbidities such as anxiety, depression, and multiple pain sites may indicate more severe disorders and poorer prognosis.

Diagnostic Criteria

- For the majority of neck pain disorders, objective diagnostic criteria are lacking. Therefore, diagnoses are symptom based.
- Diagnostic magnetic resonance imaging (MRI) is useful for specific disorders such as radicular pain, myelopathy and for severely injured patients, but is of limited value for the majority of neck pain disorders.
- Manual provocation tests are useful for determining the involvement of nerve root compression.
- For neck pain associated with whiplash trauma, a classification system has been proposed by the Québec Task Force (QTF). It defines five grades that correspond to the severity of the disorder.

Diagnosis and Treatment

Due to limited knowledge of the pathophysiology of most neck pain disorders, treatment of the cause is usually not possible. Therefore, treatment and rehabilitation interventions are mainly intended to reduce symptoms and improve function.

- There is moderate evidence that specific strengthening exercises of the neck, scapulothoracic and shoulder can reduce pain and improve function in non-specific neck pain.
- For short-term pain management there is evidence that conservative treatments such as manipulation, manual therapy and multimodal intervention can be effective.
- Structured patient education and advice to stay active is recommended.
- There is a lack of evidence that any pharmacological treatment is effective except for non-steroidal anti inflammatory drugs that may be more effective than placebo.
- Neck collar should not be offered in whiplash associated disorders grade I-III

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