

Fibromyalgia

– A BRIEF OVERVIEW

Presented by

Dennis W. Dobritt, DO, DABPM, FIPP

Introduction

What is Fibromyalgia?

Fibromyalgia is a chronic illness characterized by widespread **musculoskeletal pain**, **fatigue** and **poor sleep**.

Fibromyalgia means pain in the muscles and fibrous connective tissues.

Fibromyalgia

- * Recognized as a true illness by the American Medical Association in 1987
- * Official definition presented in Copenhagen in 1992
- * Officially recognized as a syndrome by the World Health Organization, 1993
- * IASP Classification of Pain Syndromes, 1994

Fibromyalgia

The most common cause of chronic widespread musculoskeletal pain the world.

- *Consensus Document on
Fibromyalgia*

The Copenhagen Declaration, 1992

Fibromyalgia

- Common
 - 2% age 20 —————→ 8% by age 70
 - Most common cause of diffuse pain in US!
- Women: Men 10:1
- Antecedent event in >50%
 - Flu-like illness
 - Trauma
 - Lyme Disease

Economic Impact of Fibromyalgia

- * 26 % receive some form of disability
- * \$2,274 - \$5945 average annual direct health care cost per patient
- * > \$20 billion spent annually nationwide
- * In spite of the money spent, the majority of patient's quality of life, including productivity, is not improved
- * Therefore, considerable opportunity for cost reduction

Fibromyalgia Syndrome: Clinical Characteristics

- * Pain
- * Lightheadedness, dizziness, syncope
- * Fatigue
- * Chronic insomnia
- * Cognitive deficits/short-term memory loss
- "FIBRO FOG"
- * Depression/anxiety
- * Numbness, dysesthesias in hands and feet

Associated conditions

Study by Waylonis and Heck (1992)

- * Rheumatism
- * Chronic fatigue
- * Mitral valve prolapse
- * Depression
- * Irritable bowel syndrome
- * Sleep disorders
 - * FMS sufferers noted aggravation by cold, noise, stress, weather changes

Fibromyalgia Syndrome: Diagnosis/Treatment

- The **diagnosis is made clinically**; there are no specific blood tests or other tests to “prove” the presence of fibromyalgia syndrome
- **Patient and physician education** can be invaluable
- **Physical exercise** is vital to successful treatment
- Although the use of pharmacologic therapies could be enhanced by improved knowledge regarding the pathophysiology of fibromyalgia syndrome, **all medical therapies have been used with varying degrees of success**

Causative Factors

- * Exact cause of Fibromyalgia is unknown
- * Many different factors, alone or in combination, are thought to trigger this disorder

Causative Factors

- * Triggers:
 - * Illnesses
 - * Hormonal changes
 - * Physical or emotional trauma
 - * These events may not directly cause FMS, but may awaken an underlying physiological abnormality that is already present in the form of **genetic predisposition**

Physiological Abnormalities

- * Alterations in neurotransmitter regulation
- * Alterations in immune system function
- * Alterations in sleep physiology
- * Alterations in hormonal level control
 - * Substance P (pain transmitter) found elevated in CSF of Fibromyalgia patients (Leventhal, 1999)
 - * Low cortisol level and insulin-like growth factor (Leventhal, 1999)

What is the actual problem with the body (pathophysiology)?

“there is as yet no generally agreed upon explanation for the pathogenesis of the disorder.”

Pathophysiology

~~Primary Muscle Diseases~~

Fibromyalgia is actually a Neuropathic Pain Syndrome!

- * The International Association for the Study of Pain defines neuropathic pain as "pain initiated or caused by a primary lesion or dysfunction of the nervous system"

Activation of Autonomic Nervous System

- * Fibromyalgia patients suffer from **excessive** autonomic (sympathetic) nervous system activation.
- * **Hyperactive** sympathetic nervous system
- * Treatment is aimed at **reducing** this increased activity

Pregabalin (Lyrica)

- * Placebo-controlled monotherapy study of 529 patients with FMS for safety and efficacy.
- * Randomized to receive placebo, 150/300/450 mg Pregabalin for 8 weeks.
- * 29% of treated patients (450 mg/d) vs. 13% of placebo reported at least a 50% reduction of pain that was statistically significant.

Cymbalta

- * DULOXETINE
- * SNRI Antidepressant (Serotonin-Norepinephrine Reuptake Inhibitors)
- * Increases serotonin and norepinephrine levels in the brain
- * Recent study showed benefit in Fibromyalgia patients with and without depression

Focus of Treatment

- * Improve quality of sleep
- * Pain reduction
- * Diet
- * Education
- * Exercise/muscle conditioning
- * Pharmacological Intervention
- * REDUCE THE AUTONOMIC NERVOUS SYSTEM ACTIVITY!!!

Prognosis

- * The prognosis of Fibromyalgia is influenced by precipitating and perpetuating factors
- * Fibromyalgia is considered to be a chronic pain disorder
- * Therefore, Fibromyalgia should be treated like any other chronic disorder where symptomatic relief, improved function and overall sense of well-being is the goal

THE END

QUESTIONS?