Fibromyalgia
- A BRIEF OVERVIEW

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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 in 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 - $5,945 average annual direct healthcare cost per patient
- > $20 billion spent annually nationwide
- Despite 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 Disease
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!!!
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?