Fibromyalgia: Practical Tips to Make You the Expert in 20 Minutes

Janet Lewis, M.D.
Division of Clinical Rheumatology
University of Virginia

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Overview

- Incidence: 2-5% of US population
- Characterized by:
  - Chronic widespread musculoskeletal pain
  - Fatigue
  - Sleep disturbance (nonrestorative)
  - Mood disturbance (20-50% of FM patients have co-morbid depression)
  - Quality of life & functional impairment

Key Features

- Pain
  - Chronic, widespread pain (head to toe)
  - Tender points are often present
  - Morning stiffness often reported
  - Subjective complaints of swelling
  - Reduced pain threshold

Key Features

- Fatigue
  - Present in majority
  - Overlap with chronic fatigue syndrome- 70% of pts with FM meet criteria for CFS
  - Often debilitating
  - Fibro fog
- Nonrestorative sleep

Commonly associated disorders

- Depression
  - Present in roughly 50% of FM pts
- IBS
- Headaches
  - Present in 75%
  - Most commonly migraines

Pathogenesis of Fibromyalgia

- Etiology unclear
- Current thinking
  - Augmentation of centrally mediated pain processing (central sensitization)
- Risk factors
  - Triggers
    - Psychological stress, injury, infection
  - Genetic polymorphisms

Diagnosis of Fibromyalgia

- History
  - Diffuse pain for > 3 mo
  - Fatigue & nonrestorative sleep
- Physical Exam
  - Tender points
- No specific lab tests

ACR Criteria

- Hx of widespread pain for at least 3 months
  - All 4 quadrants of body + axial skeleton
- Pain (not tenderness) in 11 of the 18 tender point sites on digital palpation
- New criteria have been proposed which do not rely on tender points

Things to Think About: Conditions that Can Simulate Fibromyalgia

- Hypothyroidism
- Sleep apnea
- Hepatitis C, HIV
- Polymyalgia rheumatica
- Autoimmune disorders – SLE, RA, Sjogrens, inflammatory myopathy
- Drug-induced myopathies (eg statins)
- Cushing's syndrome, hyperparathyroidism, Addison's disease
- Multiple sclerosis, myasthenia gravis
- Lyme disease
- Vitamin D deficiency?

Differentiating PMR from FM

- Onset in older age group (typically >65 yrs)
- Classically causes stiffness in shoulder and hip girdle
- Onset is often sudden
- ESR generally elevated
- Rapid, dramatic response (48 hrs) to 10-20 mg of prednisone

Lab Evaluation

- CBC
- Chemistry panel
- TSH
- ESR or CRP
- CK
- Consider hepatitis C
- Other tests if reasonable level of suspicion!

Treatment – Multidisciplinary Approach

- Sleep Restoration
- Pain Management
- Psychosocial Treatment
- Exercise

NonDrugTreatments for FM

- Patient Education
  - Set realistic expectations & emphasize self-efficacy
- Exercise
  - Exercise can improve sleep quality, energy, pain, mood
- Cognitive behavioral therapy
- Alternative modalities
  - Acupuncture, chiropractic, massage, ultrasound, tai chi

Exercise in Fibromylagia

- Deconditioning may contribute to symptoms
- Aerobic exercise can improve fitness & energy levels as well as decrease pain
- Graded, low-impact aerobic exercise program – aquatics or land-based
- Strengthening exercises can be helpful
- Flexibility exercises of minimal benefit

More About Exercise in Fibromyalgia

- Often need to start slow
- Start exercise at level just below capacity of participant & progress slowly
- Emphasize function over pain relief
- Can start with supervised cardiovascular fitness program – need to avoid dependence; emphasize need to continue maintenance program

Phramacologic Therapy

- Tricyclics
- SSRIs
- SNRIs
- Neuropathic
- Analgesics

Pharmacologic Therapy

- Tricyclics
  - Amitriptyline 10-50 mg qHS
  - Cyclobenzaprine 10-30 mg qHS
  - Improve pain, stiffness, tenderness, fatigue, and sleep quality
  - Minimal effect on mood

Pharmacologic Therapy

- SSRIs
  - Fluoxetine 20-80 mg daily
  - Main effect is on mood
  - Combination of fluoxetine + amitriptyline is more efficacious than either agent alone

Dual-Reuptake Inhibitors (SNRIs)

Duloxetine (Cymbalta)

- Start at 30 mg daily, can increase to 60 mg daily
- Improvement in pain independent of depression
- Adverse effects: nausea, dry mouth, insomnia, somnolence, fatigue, constipation, decreased appetite, increased sweating, agitation

Dual-Reuptake Inhibitors (SNRIs)

Milnacipran (Savella)

- SNRI (relatively greater effect on norepi) and mild NMDA inhibition
- 25-200 mg daily (Start at 12.5 mg daily, can increase to 50 mg bid)
- Improves pain, fatigue, & sleep
- Adverse effects: Nausea, constipation, headache, hot flushes, sweating, insomnia, constipation, vomiting, palpitations, increased heart rate, dry mouth, HTN

Neuropathic Approaches

- Gabapentin – Up to 2400 mg daily (divided)
- Pregabalin (Lyrica)
  - Start at 75 mg bid. Can titrate to 450 mg daily (150 mg tid)
  - Improved pain score, sleep quality, fatigue, and global measure of change
  - Adverse effects: dizziness, somnolence, wt gain, edema, blurred vision, dry mouth

Analgesics

- Tramadol 200-300 mg daily (+/- Acetominophen)
  - Be aware of risk of serotonin syndrome when used in combination with SSRIs/SNRIx

Pharmacologic agents of limited or no benefit

- Prednisone
- Sedative hypnotics
- Opioid analgesics
  - May worsen chronic pain
- Thyroid hormone

Why a Multidisciplinary Approach?

- Symptoms of Pain, Fatigue
  - Nociceptive processes
  - Disordered sensory processing
- Dysfunctional Consequences of Symptoms
  - Increased distress
  - Decreased activity
  - Isolation
  - Poor sleep
  - Maladaptive illness behavior

Summary

- Establish diagnosis/ Patient education
  - Lab testing as appropriate
  - Set realistic goals
- Address treatment of associated conditions including mood and sleep disorders

Summary

- Comprehensive treatment approach should include non-pharmacologic and pharmacologic modalities
  - Low dose TCA/cyclobenzaprine
  - Exercise program
  - Cognitive behavioral therapy
  - If no response, trial of SSRI/SNRI/tramadol/pregabalin

A Few Good Reviews

- Motley CP et al. Fibromyalgia: Helping your patient while maintaining your sanity. Primary Care Clin Office Practice 2010; 37: 743-755
- Shipley M. Chronic widespread pain and fibromyalgia syndrome. Medicine 2010; 38: 202-204.
- Schmidt-Wilcke, T et al. Fibromyalgia: from pathophysiology to therapy. Nat. Rev. Rheumatology 2011; 7: 518-527

Patient resources

- www.knowfibro.com
- www.fibrocenter.com
- www.fibrotogether.com
- www.painfoundation.org
- Online Fibromyalgia Self-Help
  - www.cfidsselfhelp.org
  - www.treatcfsfm.org