FIBROMYALGIA

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Case Presentation-Fibromyalgia

- 30 year old female
- Chief complaint of back pain for past year
- Vague feeling of weakness and pain into hips
- Hurts in all activities, pain 7/10
- History of fatigue, IBS, difficulty sleeping, depression
- Exam-normal strength and reflexes-tenderness in back and neck and shoulders
- Appears depressed
Fibromyalgia: Signs and Symptoms

- Universal symptom is widespread pain affecting all four quadrants of the body for at least 3 months.
- At least 11 of 18 tender points around the neck, shoulder, chest, hip, knee, and elbow regions.
- It is also characterized by, muscle ache, restless sleep, awakening feeling tired, chronic fatigue, anxiety, depression, and disturbances in bowel function.
Fibromyalgia: Signs and Symptoms

- Is a non-life-threatening and does not cause body damage, deformity, or injury to internal body organs.
- Other symptoms include migraine and tension headaches, numbness or tingling of different parts of the body, abdominal pain related to irritable bowel syndrome ("spastic colon"), and irritable bladder, causing painful and frequent urination.
Fibromyalgia

How is it diagnosed?

- no blood tests or X-rays specific to the diagnosis of fibromyalgia.
- Tests are often done to exclude other possible diagnoses.
- Ultimately, the diagnosis of fibromyalgia is made purely on clinical grounds based on history and physical examination. (typically, but not always, patients will have at least 11 of the 18 classic fibromyalgia tender points), by finding no accompanying tissue swelling or inflammation, and by excluding other medical conditions that can mimic fibromyalgia.
Fibromyalgia: Treatment

- Since symptoms are diverse and vary among patients, treatment programs must be individualized for each patient.
- Treatment programs are most effective when they combine patient education, stress reduction, regular exercise, and medications if necessary.
- There is no known cure for fibromyalgia but it is a functional disorder and can be treated.
Low Back Pain: Physical Therapy Perspective – Laurie Bell, PT

- Patient education
- Modalities
- Exercise
Fibromyalgia: patient education

- Lifestyle modifications
- Posture, ergonomics and body mechanics
- Pacing activities throughout day
- Avoid bed rest as a means of pain control
- Sleep schedule
- Coping with stress
Fibromyalgia: therapeutic exercise/modalities

- Modalities: heat, ice, electric stimulation
- Exercise to improve physical activity and function
  - aerobic fitness exercise to improve endurance and stamina
  - walk, cycle aerobics class, dancing, aquatics
  - strengthening exercise of core and extremities
  - flexibility exercise to improve ROM and mobility
  - relaxation exercise to improve coping and reduce stress
- Ultimate goal is patient independence: we want them to learn strategies to ease pain and increase activity level and do them daily at home.
Fibromyalgia

- Pharmacologic Management
  - Analgesics
  - Anti-Epileptics
  - Anti-Depressants
  - Experimental agents
Fibromyalgia Pharmacologic Management

- Analgesics

  - Opiates: No RCT trials demonstrate safety or efficacy for long term use
  - Opiates may with long term use be harmful, causing sensitization and opiate-induced hyperalgesia
  - Tramadol: Mixed opiate and SSRI properties
  - Tramadol: May have some usefulness due to SSRI properties
  - Careful when combining with AD or etoh
Fibromyalgia Pharmacologic Management

- Anti-Epileptics
  - Gabapentin: Useful as initial therapy, helps with sleep cycle. No benefit in dosing more than 2400 mg/day
  - Pregabalin: More potent than gabapentin. Higher incidence of sedation and edema as well as cognitive effects.
Fibromyalgia Pharmacologic Management

- Anti-Depressants
  TCAD best studied may be most useful. Side effect profile especially in elderly may limit usefulness. Best for younger patients who can’t sleep.
  SSRI fluoxetine citalopram paroxetine sertraline
  Best utilized when mood stabilization is major goal.
  SNRI venlafaxine duloxetine milnacipran
  Monitor blood pressure carefully.
Fibromyalgia Pharmacologic Management

- Novel agents
  - Cyclobenzaprine low dose nightly therapy for sleep hygiene
  - Ketamine: some studies suggested short-term efficacy
  - Dextromethorphan at higher doses may work as a nonselective serotonin reuptake inhibitor
Injection Therapy for Fibromyalgia

Steven A. Severyn, MD, MBA, MSS
Fibromyalgia Syndrome (FMS)

- Chronic widespread pain used to be its defining feature, but patients also may exhibit a range of other symptoms, including sleep disturbance, fatigue, irritable bowel syndrome, headache, and mood disorders.¹

- The 1990 American College of Rheumatology (ACR) criteria featured tender point examination and created the impression of FMS as a peripheral musculoskeletal disease with the pathology centered on the tender points.

1990 ACR Trigger Point Locations

The 18 tender points of Fibromyalgia
2010 ACR FMS Criteria

- Combination of occurrence of widely distributed painful areas (WPI, widespread pain index score) and severity of systemic symptoms (SS, symptom severity score)
- Symptoms present at similar severity for at least 3 months
- Exclusion of other disorders
Table 1. ACR 2010 fibromyalgia diagnostic criteria

**Criteria**
A patient satisfies the diagnostic criteria for FMS if the following 3 conditions are met:
1. WPI ≥ 7 and SS scale score ≥ 5 or WPI 3 - 6 and SS scale score ≥ 9.
2. Symptoms have been present at a similar level for at least 3 months.
3. The patient does not have a disorder that would otherwise explain the pain.

**Ascertainment**

**WPI:**
Note the number of areas in which the patient has had pain over the past week (score will be between 0 and 19): left shoulder girdle, right shoulder girdle, left hip (buttock, trochanter), right hip (buttock, trochanter), left jaw, right jaw, upper back, lower back, left upper arm, right upper arm, left lower arm, right lower arm, left upper leg, right upper leg, left lower leg, right lower leg, neck, chest, abdomen.

**SS scale score:**
A. Fatigue, waking unrefreshed, cognitive symptoms.
For each of the 3 symptoms above, indicate the level of severity over the past week using the following scale: 0, no problem; 1, slight or mild problems, generally mild or intermittent; 2, moderate, considerable problems, often present or at a moderate level or both; 3, severe, pervasive, continuous, life-disturbing problems.
B. Considering somatic symptoms in general, indicate whether the patient has 0, no symptoms; 1, few symptoms; 2, a moderate number of symptoms; or 3, many symptoms.
The SS scale score is the sum of the severity of the 3 symptoms (fatigue, waking unrefreshed, cognitive symptoms) plus the extent of somatic symptoms in general. The final SS score is between 0 and 12.

FMS, fibromyalgia syndrome; WPI, widespread pain index; SS, symptom severity.
Injection Therapy

- Muscular trigger points are targets for dry needling or saline or local anesthetic infiltration

- Steroid injection of trigger points is common
  - Unproven additive
  - Effects of steroid exposure
  - Limits steroid available for treatment of other conditions

- 18 classic tender points are also locations of other disorders for which steroid injection may be more specific and beneficial
Steroids

- Daily glucocorticoid (cortisol) secretion equivalent to:
  - 20-30 mg hydrocortisone
  - 5-7 mg oral Prednisone
    - (Prednisone, Aristocort, Kenalog, Depo-Medrol are approximately equipotent)
- Secretion governed by HPA axis through ACRH and ACTH
- AIDS and immunologic disorders (and TB globally) are principal causes of primary adrenocortical insufficiency (AI)
- Iatrogenic steroid is the principal cause of tertiary AI

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HPA Suppression and Maximal Recommended Dose

- 4 days to 6 weeks of HPA suppression after a single 40 mg administration
- Patients receiving 5 mg Prednisone daily have largely intact HPA function
- HPA recovery after chronic steroid use can take up to a year
- Commonly accepted standard is 240 mg exogenous steroid/year