Fibromyalgia: It’s a Pain in My Neck!

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Learning Objectives

1. Use validated criteria, symptom scores, and presence of chronic widespread pain with fatigue and sleep symptoms for diagnosis of fibromyalgia syndrome.

2. Evaluate patients with diagnosed fibromyalgia for comorbid conditions and treat or refer accordingly.

3. Follow an evidence-based, algorithm based on appropriate guidelines, for the pharmacologic management of chronic pain, including fibromyalgia.

4. Develop collaborative treatment to avoid opioids for fibromyalgia, taper off/refer opioid legacy patients, and use opioids appropriately for acute pain incidents.

Audience Engagement System

Step 1

Step 2

Step 3
Associated Session

• (PBL) Fibromyalgia: It’s a Pain in My Neck!

Practice Recommendations

• Utilize the American College of Rheumatology diagnostic criteria in the diagnosis of patients suspected of having fibromyalgia (FM; SOR C)
• Treat comorbid conditions in patients with FM (SOR C)
• Offer patients a multidimensional approach to treatment of FM (SOR A)
What is Fibromyalgia?

- Chronic
- Widespread pain, stiffness, fatigue
- Sleep disturbance, impaired cognition
- 2% of the US population
- Women 7X > men
- Normal testing

Clinical Manifestation

- Widespread pain
- “Hurt all over”
- Proximal regions
- Fatigue
Case

• 44 yo female presents with back and leg pain of several months duration
• She had a hx of endometriosis that she had TAH/BSO for
• One of her friends has fibromyalgia and she wonders if she might have it too

AES Question #1

Which of the following conditions shares pathophysiology with FM?

A. Irritable Bowel Syndrome
B. Temporomandibular Joint Disorder
C. Interstitial cystitis
D. Endometriosis
E. All of the above
Central Sensitivity Syndrome (CSS)

Predisposing Factors for Central Sensitivity Syndrome

• Genetic
• Sleep
• Nervous System
• Infection
• Psychological
Case...con’t

- PMH: anxiety
- Medications: none
- SH: She works as a CNA, a single mom, has 4 kids at home
Demographics

- Female
- Divorce
- Low Income
- Did not complete HS

Associated Conditions

- PTSD
- Sexual abuse, sexual assault
- Mood disorders (personal or FH)
- Sleep disturbances
- Somatization

https://upload.wikimedia.org/wikipedia/commons/9/94/A_woman_whose_face_expresses_sadness._Etching_in_the_crayon_Wellcome_V0009337.jpg
Diagnosis

• Tender point criteria sens 88% spec 81%
• ACR more patients
• ACR 2010 criteria: focus on symptoms, men, labs not needed, rule out electrolytes, thyroid, anemia\(^2\)
• Support dx but not exclude it
• Diagnosis validates patients symptoms

Diagnosis-Tender Points

• Chronic widespread pain 3 months
• Tender in 11 of 18 locations
• Occiput, trapezius, supraspinatus, gluteal, greater trochanter, low cervical, second rib, Lateral epicondyle, knee\(^2\)
Diagnosis-2010 ACR Criteria

1. Widespread Pain Index (WPI) >7 and the Symptom Severity Scale Score, (SS) >5 (WPI 3-6, SS >9)

2. Symptoms for at least 3 months

3. Absence of another disorder
AES Question #2

Which areas are included in the WPI?

A. Neck  
B. Jaw  
C. Low Back  
D. Buttock  
E. All of the above  
F. A and C

Widespread pain index

• How many areas has the patient had pain over the last week?
  • Score 0-19

• Neck  
• Jaw, left  
• Jaw, right  
• Shoulder girdle, left  
• Shoulder girdle, right  
• Upper arm, left  
• Upper arm, right  
• Lower arm, left  
• Lower arm, right  
• Chest  
• Abdomen  
• Upper back  
• Lower back  
• Hip (buttock, trochanter), left  
• Hip (buttock, trochanter), right  
• Upper leg, left  
• Upper leg, right  
• Lower leg, left  
• Lower leg, right
Our patient…

- Legs ache all day, unable to work 2-3 days a month (2)
- Also has bilateral shoulder, bilateral wrist and bilateral low back pain; (6)
- (8)

Symptom Severity Scaled Score

- Fatigue 0-3
- Waking unrefreshed 0-3
- Cognitive symptoms 0-3

• 0=no problem
• 1=slight/intermittent, mild
• 2=mod, considerable prob
• 3=severe, pervasive, cont
Our patient

- Fatigue, not debilitating-(1)
- Sleeps ok but most days wakes up feeling tired-(2)
- Frustrated, trouble concentrating at work, forgetting important things-(2)
- (5)

SS Scaled Score

- PLUS Overall somatic symptoms
- No sxs=0
- Few=1 (1-10)
- Moderate=2 (11-24)
- Severe=3 (>25)
- TOTAL is the additive of Symptoms and Somatic score
Our Patient

- She endorses urinary incontinence, chest pain, itching, and dizziness
- (1)
Scoring of Our Patient

• WPI=8
• Symptom Severity Scaled Score=6
  – Symptom Severity=5
  – Somatic symptoms=1
• (WPI >7 and SS Scaled score>5)

Clinical Features

• Aggravated: cold weather, poor sleep, stress
• Improved: warm/dry weather, physical activity, relaxation, adequate sleep
• Fibromyalgia Impact Questionnaire
R-Fibromyalgia Impact Questionnaire

- Used to assess
- Difficulty with task (9)
- Prevented from activity (2)
- Somatic symptoms (10)
- Score 0-100
  - 75-100 Extreme
  - 60-74 Severe
  - 43-59 Moderate
  - 0-42 Mild

http://fiqrinfo.ipage.com/index.html
Fibromyalgianess

• Robert Hawkins MD
• JAOA
• Continuum
• May not meet criteria
• Benefit from tx

Differential Diagnosis

• Myofascial pain syndrome: tender muscles, localized, axial
• Chronic fatigue syndrome: subclinical inflammation
• Hypothyroid: fatigue, malaise, muscle weakness
• Inflammatory myopathies: PMR, other rheum, statins
Laboratory testing

- TSH
- ESR
- CBC
- CK
- ANA or other

Pilot Study of FM Detection Tool

- FibroDetect® Questionnaire
- French, English and German
- Used ACR + and ACR - patients
- 14 questions down to 6
Six Things

• Body part-upper body, upper limb, lower limb (3)
• Frequency-daily (1)
• 3 Kinds of pain (1)
• Frequency of tiredness-daily (1)
• Physical effort on tiredness-more tired (1)
• 7 somatic symptoms (1)
• Recognize themselves in the questions (1)

TREATMENTS
Non-Pharm Interventions

- Education
- Exercise
- CBT
- Complementary and alternative therapies

Education

- Make the dx
- Reduce visits, testing, and rx
- Overall ↓ cost of care
- Reduce symptoms
Education con’t

• Patient-physician interaction, organized groups
• Set expectations
• Chronic illness
• Not eliminate

Case…con’t

• 44 yo female…
• You diagnose her with FM
• You give some education regarding lifestyle changes
• You draw your labs just to make sure you are not missing something
AES Question #3

Which of the following should you recommend first?

A. Herbal supplements- anthocyanidins
B. Weight lifting
C. Running 3 miles, 5 days a week
D. Acupuncture
E. Walking around the block

Exercise

- Moderate intensity
- Aerobic
- Strength, flexibility can improve symptoms
- Exercise prescription:
  - type aerobic
  - frequency 2-3 days
  - duration 20-30 minutes
- Goal is to maintain function
Cognitive Behavioral Therapy

• Address maladaptive thoughts
• Stress reduction
• Catastrophizing/helplessness
• Balance meaningful work and leisure

Complementary and Alternative Therapies

Take home points:
• Consider symptom diaries to assess benefit, consider cost, and medication interactions
• Biofeedback and acupuncture supported by some
• One pilot study of OMM with meds

No good evidence:
• Massage, hydrotherapy, homeopathic, acupuncture, anthocyanidins, capsaicin, S-adenosylmethionine
• Nutritional, herbal, hormonal, hypnosis, yoga, chiropractic, Tai chi, massage, magnetic therapy, tender point injections
Resources for the Patient

- familydoctor.org
- Arthritis Foundation
- National Fibromyalgia Association

Case…con’t

- 44 yo female
- She is here for follow-up, she has been walking and it has been helping a little
- She asks if there is a medicine to help her sleep
AES Question #4

Which drug is FDA approved for the treatment of FM?

A. Amitriptyline  
B. Fluoxetine  
C. Pregabalin  
D. Cyclobenzaprine  
E. Tramadol

FDA Approved Medications

- Duloxetine  
- Milnacipran  
- Pregabalin  
- Treat multiple symptoms
Antidepressants

- SNRI pain, sleep, depressed mood
- TCAs for fatigue, Amitriptyline 25-50mg bedtime
- SSRIs slight improvement in pain
- Systematic review, 30% reduction pain, sleep and fatigue (Amitriptyline-4, duloxetine-9 and milnacipran-11)$^2$
- Moderate evidence: venlafaxine, fluoxetine, tramadol*

Cyclobenzaprine

- Improves pain and sleep
- Not fatigue
- 10-30mg bedtime
Pregabalin

- FDA approved for treatment FM
- Reduces FM pain by 50%
- Maintain 30% ↓ for 13 weeks
- Most effective dose 450mg daily
- Quit taking due to adverse effects

No Evidence

- Steroids
- Melatonin
- NSAID
- Opioids*
- Thyroid hormone
AES Question #5

When should you prescribe opioids for Fibromyalgia patients?

A. You shouldn’t
B. Only if they are already on opioids
C. Only if you have tried other meds
D. Only if you use oxycodone
E. Only if the patient has allodynia

Opioids

- Unclear mechanism
- No evidence oxycodone
- Adverse effects: allodynia, hyperalgesia, addiction, misuse, diversion
- Other treatments first
- Assess for risk of misuse, educate, goals, track sxs, longer acting, adverse effects
Study

- Primary Care physicians
- 429 cases/month
- 5 cases FM/month
- Two groups
- 50% QoL, 1-4 visits (timely and beneficial)

Results

- Fewer visits to make dx
- Fewer referrals
- Fewer medication changes
- Fewer patients with no improvement
- More patients with marked/significant improvement
Physician Perception

- Patient characteristics
- Demanding: listening and attention
- Dissatisfied
- Complaining, critical, difficult to deal with, conflicting
- Very well informed
- Need to be recognized

Thank you

- PBL cases today:
  - 37 yo wanting lots of tests
  - 43 yo female using her friend’s hydrocodone
  - 56 yo male has exhausted all medications
Questions

Contact Information

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References