Fibromyalgia and pain management

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Disclosure

- none

Objectives

- ***Fibromyalgia***
  - To be comfortable making the diagnosis of fibromyalgia.
  - Understand the evidence and guidelines from 2010 and 2012 towards managing fibromyalgia.

Definitions

- **Pain:** The International Association for the Study of Pain (IASP) defines pain as: **An unpleasent sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage.**
- Key points:
  - Not just a sensory experience, but has an affective and cognitive response
  - The relationship between pain and tissue damage is not necesarily correlated

Definitions

- Nociception:
  - the ability to feel pain, caused by stimulation of a nociceptor. Physiologically, it is composed of four processes: Transduction, Transmission, Modulation and Perception. Acute Pain
- Acute Pain:
  - Pain resulting from nociceptor activation due to damage to tissues. It typically resolves once the tissue damage is repaired. It is useful to avoid situations that can cause serious damage to our bodies.
- Chronic Pain:
  - Pain that persists beyond the usual course of an acute illness or injury. A duration of pain > 3 - 6 months is often used to designate pain as chronic. It serves no physiologic role, and is a disease state rather than a symptom.

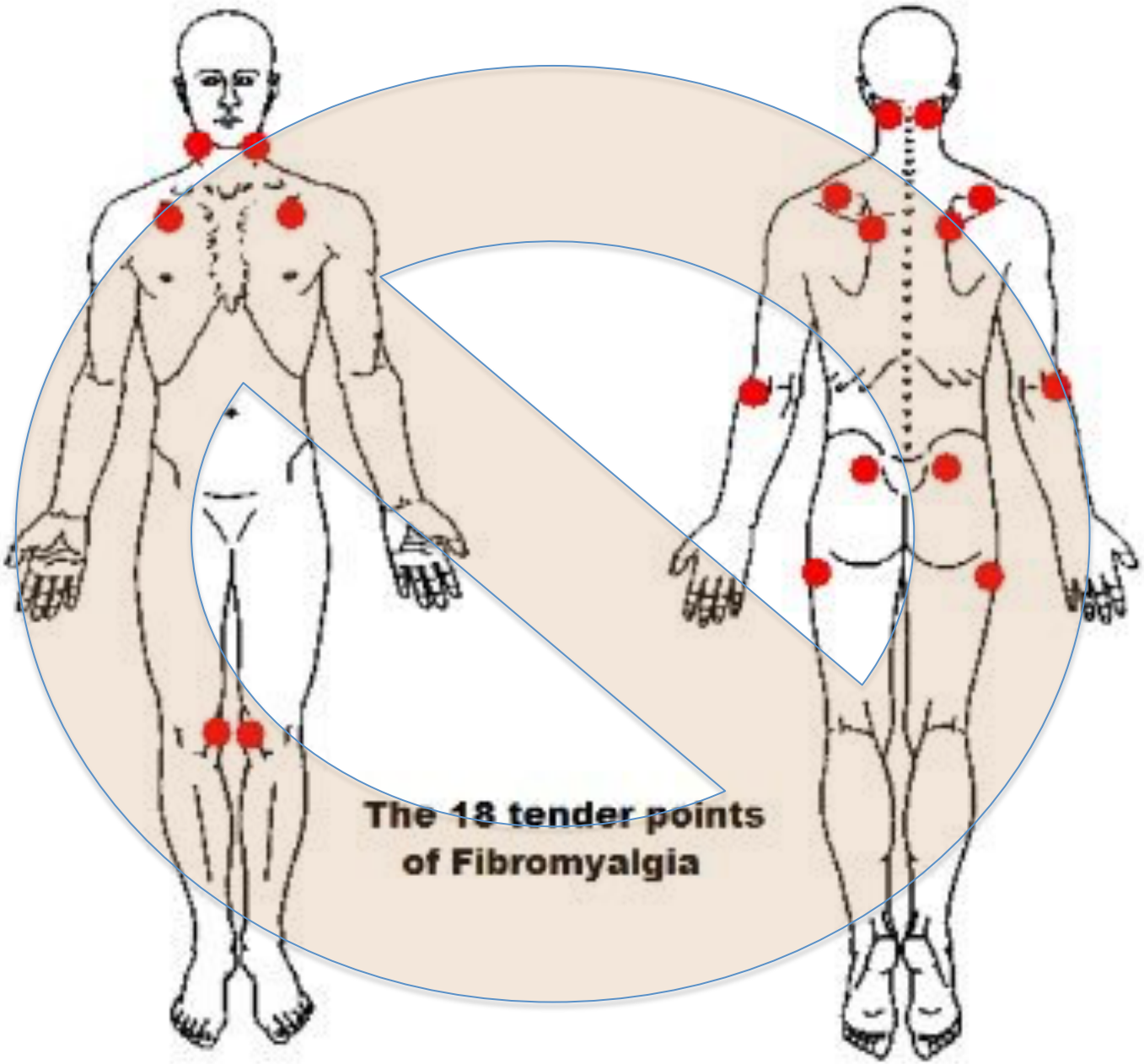
Definitions

- Neuropathic Pain:
  - Pain initiated or caused by a primary lesion or dysfunction in the peripheral or central nervous system. It can remain present without ongoing disease.
- Allodynia:
  - A condition in which pain arises from a stimulus that would not normally be experienced as painful.
- Hyperalgesia:
  - An increased response to a stimulus that is normally painful.

Definitions

- Peripheral Sensitization:
  - A reduction in (pain) threshold and an increase in responsiveness of the peripheral ends of nociceptors in the form of an increase in the frequency of nerve impulse firing.
- Central Sensitization:
  - An increase in the excitability of neurons within the central nervous system, so that normal inputs begin to produce abnormal responses.

Fibromyalgia


The 18 tender points
of Fibromyalgia

MSK Pain Syndromes - Fibromyalgia

ACR 2010 Diagnostic Criteria

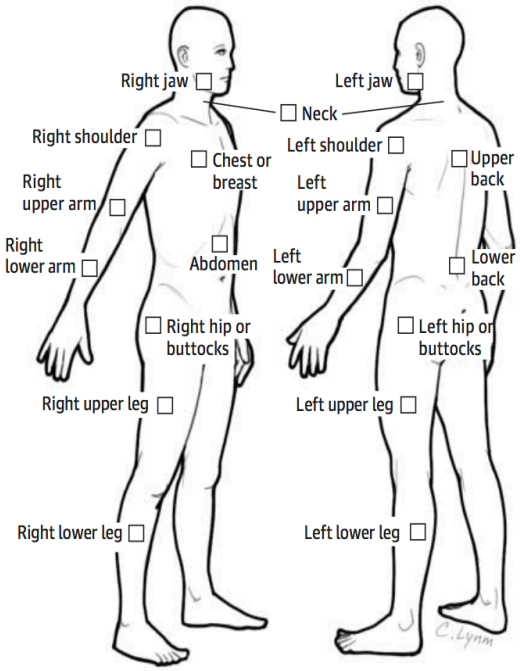
Widespread Pain Index (WPI) ≥ 7 AND Symptom Severity (SS) scale ≥ 5 or WPI 3-6 AND SS ≥ 9	**WPI: total out of 19** *Note the number of areas in which the patient has had pain over the last week* • Shoulder girdle, left Shoulder girdle, right • Upper arm, left • Upper arm, right • Lower arm, left • Lower arm, right • Hip (buttock, trochanter), left • Hip (buttock, trochanter), right • Upper leg, left Upper leg, right • Lower leg, left • Lower leg, right • Jaw, left • Jaw, right • Chest • Abdomen • Upper back • Lower back • Neck	**SS scale: total out of 12** • Fatigue • Waking Unrefreshed • Cognitive Symptoms *For each, indicate the level of severity over the past week:* 0 = no problem 1 = slight or mild problems 2 = moderate, considerable problems, often present and/or at a moderate level 3 = severe: pervasive, continuous, life-disturbing problems *Considering somatic symptoms in general, indicate whether the patient has:* 0 = no symptoms 1 = few symptoms 2 = a moderate number of symptoms 3 = a great deal of symptoms
Symptoms have been present at a similar level		
No other disorder that would otherwise explain the pain		

MSK Pain Syndromes - Fibromyalgia

Diagnosis

Widespread Pain Index
(1 point per check box; score range: 0-19 points)

(1) Please indicate if you have had pain or tenderness **during the past 7 days** in the areas shown below.
Check the boxes in the diagram for each area in which you have had pain or tenderness.



Symptom Severity
(score range: 0-12 points)

(2) For each symptom listed below, use the following scale to indicate the severity of the symptom **during the past 7 days**.

- **No problem**
- **Slight or mild problem**: generally mild or intermittent
- **Moderate problem**: considerable problems; often present and/or at a moderate level
- **Severe problem**: continuous, life-disturbing problems

	No problem	Slight or mild problem	Moderate problem	Severe problem
Points	0	1	2	3
A. Fatigue	☐	☐	☐	☐
B. Trouble thinking or remembering	☐	☐	☐	☐
C. Waking up tired (unrefreshed)	☐	☐	☐	☐

(3) During the **past 6 months** have you had any of the following symptoms?

	Points	0	1
A. Pain or cramps in lower abdomen		☐ No	☐ Yes
B. Depression		☐ No	☐ Yes
C. Headache		☐ No	☐ Yes

Additional criteria (no score)

(4) Have the symptoms in questions 2 and 3 and widespread pain been present at a similar level for at **least 3 months**?

☐ No ☐ Yes

(5) Do you have a disorder that would otherwise explain the pain?

☐ No ☐ Yes

ACR indicates American College of Rheumatology. Scoring information is shown in blue. The possible score ranges from 0 to 31 points; a score ≥13 points is consistent with a diagnosis of fibromyalgia. Additional scoring information and a printer-ready version of this survey that patients can complete are available online (eFigure 1 and eFigure 2 in the Supplement).

- Pain > 3mos
- Fatigue
- Non-restorative sleep
- Cognitive dysfunction
- Mood disorder
- Other somatic symptoms

ORIGINAL ARTICLE

2012 Canadian Guidelines for the diagnosis and management of fibromyalgia syndrome: Executive summary

Mary-Ann Fitzcharles MB ChB[1,2], Peter A Ste-Marie BA[2,3], Don L Goldenberg MD[4], John X Pereira MD[5], Susan Abbey MD[6], Manon Choinière PhD[7], Gordon Ko MD[8], Dwight E Moulin MD[9], Pantelis Panopalis MD[1], Johanne Proulx[10], Yoram Shir MD[2]; the National Fibromyalgia Guideline Advisory Panel

Diagnosis

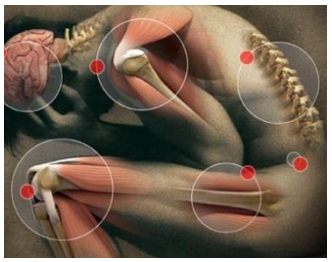
- Widespread pain:
  - Above and below the waist
  - + sleep problems
  - + fatigue
  - + mood disturbance
  - + cognitive
  - Irritable bowel, migraines, interstitial cystitis

Differential diagnosis

- Endocrine
  - Hypothyroidism, Hyperparathyroidism
- Psychiatric
  - Depression, borderline personality d/o, somatization d/o
- Musculoskeletal
  - Early inflamatory arthritis, PMR, SLE,
- Neurological
  - MS, Myopathy,

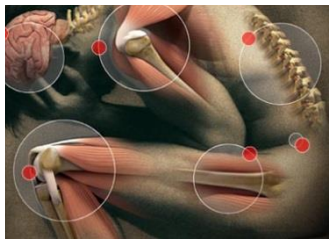
Management of FM – key points

- No ideal treatment
- Patient tailored approach (level 5)
  - Symptom-based management
  - Non-pharmacologic & pharmacologic strategies
- Aim to
  - ↓ symptoms
  - Maintain / improve function
- Self-management strategies are imperative (level 1)
- Internal locus of control
  - Patient active participant (level 1)
  - Multimodal approach (level 1)
  - Realistic goals, coping strategies (level 5)
  - Pacing, but continue normal life (level 4)



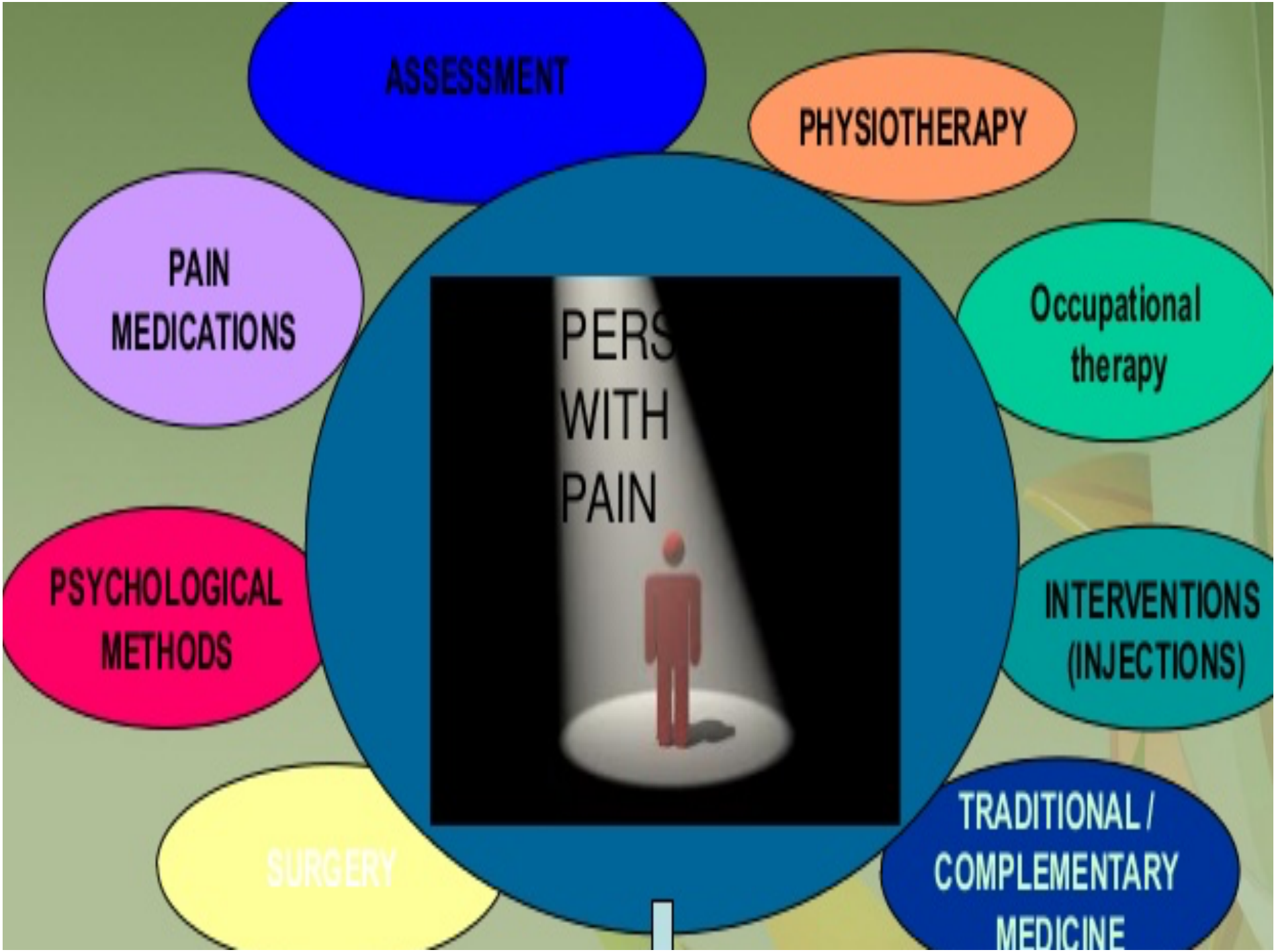
Management of FM
Non-pharmacological treatments

- Exercise (level 1)
  - Best available evidence
  - Any type
    - aerobics, water based, stretching, Tai Chi, Qi Gong
- CAM : Insufficient evidence (level 1)
  - Encourage disclosure of use (level 5)
  - Small randomized trial supports Vit D supplementation (Wepner, Pain 2014)



Management of FM – pharmacological options

- Change 1 thing at a time
- Start with very low doses and go slow
- Side effects often similar to symptoms of FM
- Caution re dependency on pills which fosters “passivity”
- Amitriptyline: 10mg at bedtime
- Duloxetine: 30mg in am with food
- Pregabalin: 25-50mg with supper
- Gabapentin: 100mg with supper
- Split tablets, open and sprinkle meds for really sensitive patients
- Consider polypharmacy (but no evidence)


ASSESSMENT
PHYSIOTHERAPY
PAIN MEDICATIONS
Occupational therapy
PERS WITH PAIN
PSYCHOLOGICAL METHODS
INTERVENTIONS (INJECTIONS)
SURGERY
TRADITIONAL / COMPLEMENTARY MEDICINE

Resources

- BC ECHO for Chronic Pain
  - https://painbc.ca/health-professionals/education/echo
- Pain BC – Pain Foundations course
  - https://painbc.ca/health-professionals/education/pain-foundations-primary-care-providers

Resources

- Physiotherapy- aquatherapy programs, yoga, tai chi, Gentle movement at Home via Pain BC.
- Pain Psychology- CBT, MBSR, ABT
- Occupational therapy
- Multidisciplanary pain clinics
  - JPOCSC, SPH Pain Clinic, CPRI, Change Pain Clinic
  - Self Management Streams- Live Plan Be, Pain BC
  - Pain Education programs

Questions?

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