

Fibromyalgia Pain

by

Frank Minirth, M.D., Ph.D.

Radio 03/31/09

- Introduction
- Bible verses
 - Psalm 73:25-26 – Whom have I in heaven but thee? and there is none upon earth that I desire beside thee. My flesh and my heart faileth: but God is the strength of my heart, and my portion forever.
 - Isaiah 41:10 – Fear thou not; for I am with thee: be not dismayed; for I am thy God: I will strengthen thee; yea, I will help thee; yea, I will uphold thee with the right hand of my righteousness.
 - Luke 18:1 – And he spake a parable unto them to this end, that ye ought always to pray, and not to faint;

- Fibromyalgia (FM)

Fibromyalgia is found in 2-5% of the US population (3-6 million people); it is a neurological disorder characterized by:

- widespread pain (chronic)—greater than three months
- generalized heightened pain sensitivity
- widespread tenderness – 9 bilateral locations
 - suboccipital muscles
 - trapezius
 - supraspinatus
 - gluteal muscles
 - greater trochanter
 - low cervical
 - second rib
 - lateral epicondyle
 - knee
- sleep disturbance

- morning stiffness
- depression
- comorbidities with neuropathies and circulatory disorders

It occurs more in women (7 to 1). Health care costs are three times higher in those with FM.

Etiological and other salient factors include:

- altered central pain processing; disordered pain regulation
- central sensitization
- ↓ REM
- ↓ total sleep time
- ↑ awakening from sleep
- peripheral muscular involvement, central neurotransmitter dysregulation
- anxiety (44-51%)
- chronic emotional stress
- high comorbidity with depression (70%), PTSD, and other anxiety disorders
- chronic hyperarousal
- anger (85%) with chronic sympathetic activity that can alter descending and central pain modulation systems

Treatments of FM have included:

- Lyrica (pregabalin)—FDA approved for FM
 - Lyrica binds to alpha 2, delta; subunits of calcium channels of neurons in the CNS and thereby ↓ glutamate, ↓ substance P, and ↓ NE which ↓ hyperexcitable neurons. Lyrica has been used off-label for anxiety. Side effects include dizziness, sedation, weight gain, blurred vision, dry mouth, constipation, angioedema, hypersensitivity, edema, increased CK, decreased platelet count.
 - 34% showed improvement with medication

- education, exercise, cognitive-behavioral therapy (CBT)
- antidepressants (TCAs, SNRIs such as Cymbalta/duloxetine, which is FDA approved, Effexor, and Pristiq)
- muscle relaxors such as cyclobenzaprine (Flexaril)
- milnacipran—an SNRI approved in Europe for chronic pain
- tramadol (Ultram)—an SNRI plus a mu opioid agonist
- analgesics
- anticonvulsants (gabapentin)
- tropisetron—5HT3 antagonist
- Conclusion
- Bible verses
 - Psalm 73:25-26 – Whom have I in heaven but thee? and there is none upon earth that I desire beside thee. My flesh and my heart faileth: but God is the strength of my heart, and my portion forever.
 - Isaiah 41:10 – Fear thou not; for I am with thee: be not dismayed; for I am thy God: I will strengthen thee; yea, I will help thee; yea, I will uphold thee with the right hand of my righteousness.
 - Luke 18:1 – And he spake a parable unto them to this end, that ye ought always to pray, and not to faint;