


Welcome
 American Herbalists Guild
 Professional Herbal Training
 Webinars

1

An Association of
 Herbal Practitioners

PO Box 230741
 Boston, MA 02123
 857.350.3128
ahgoffice@earthlink.net




**AMERICAN
 HERBALISTS
 GUILD**

2

Fibromyalgia
 Natural Methods
 and
 Novel Approaches

K. P. Khalsa
 August, 2011




**AMERICAN
 HERBALISTS
 GUILD**

3

Karta Purkh Singh Khalsa





Dietitian-Nutritionist
 Herbalist

President
 American Herbalists
 Guild

6

Fibromyalgia



Pain is a serious disorder

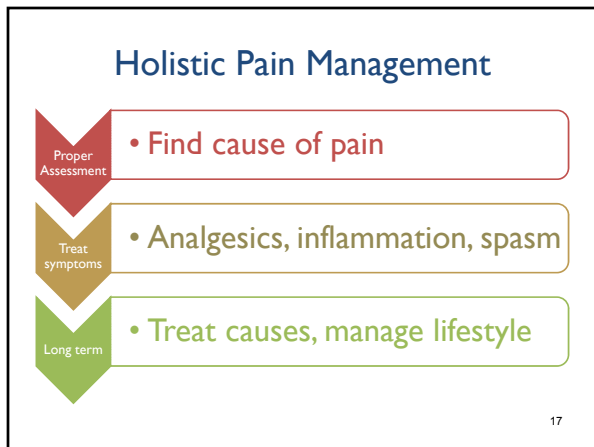
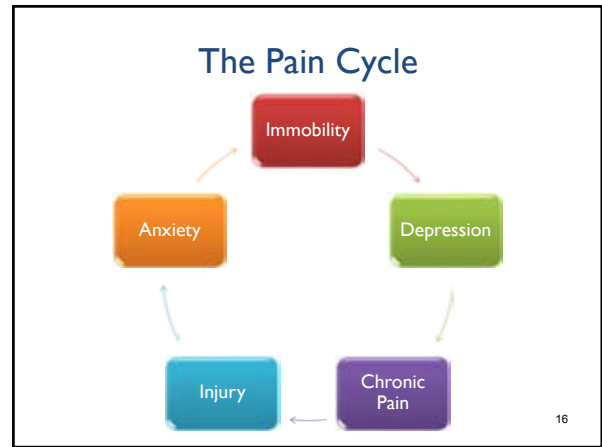
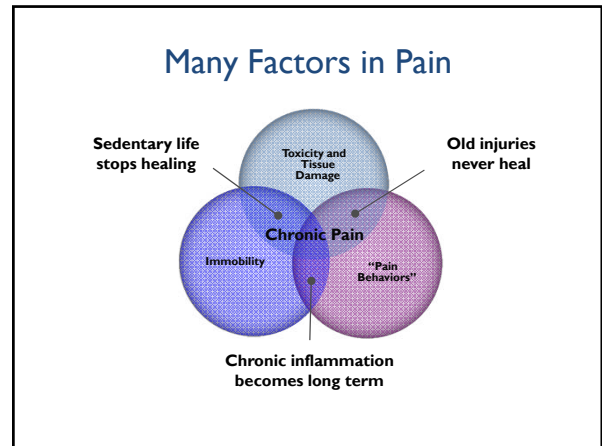
Many Things We Can Do for Pain

-  Diet
-  Bodywork
-  Natural medicines



Pain Disorders

- Clinical approaches
 - Suppress pain (acute or chronic)—analgesics
 - Treat underlying cause, restore tissue and function
 - Reduce inflammation, if present
- Energetic approaches—pain is energy blockage (Bi syndromes)—Asian approach is energy movers



Food and Diet

Oligoantigenic (Challenge/elimination) diet

Lamb/Turkey

Pears

Rice

Cabbage

Olive oil

Few Foods Diet



20



Green vegetables



Bitter melon



Bitter melon juice



Cherry



Ghee



Nuts



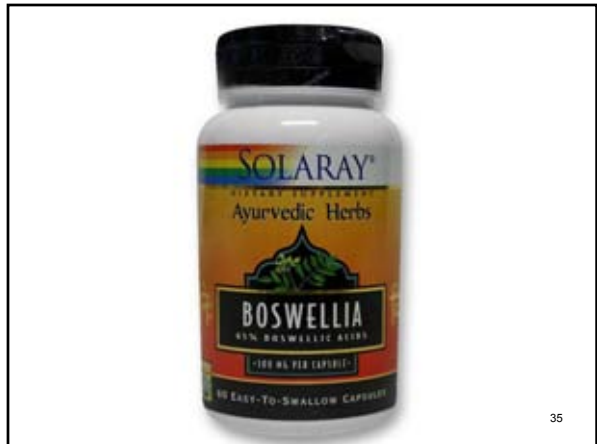
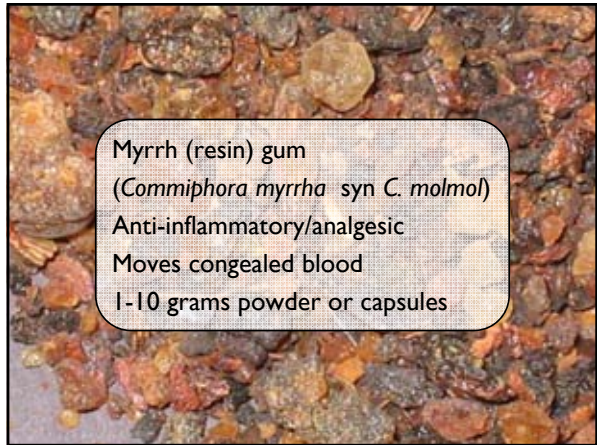
Sesame seeds

29



Sesame Seed

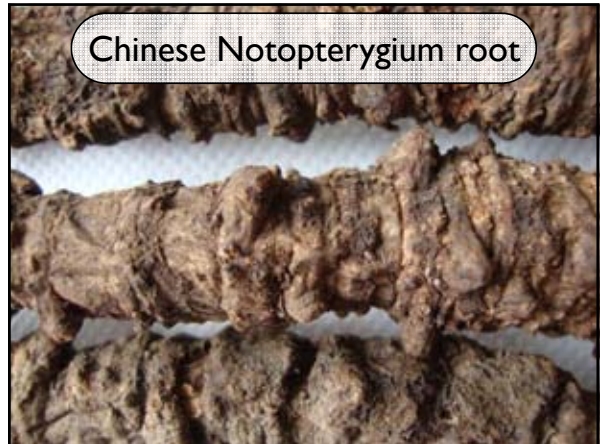
General Joint Herbs



Ginger

Warming for cold joints and stiffness
Especially cold (FMS)
Tea, cooking, powder, capsules

Chinese Notopterygium root



39

Chinese Notopterygium Root

Upward moving, dispersing
Diaphoresis
Pacifying vata
Relieving pain
Unblock painful obstructed vata

40

Chinese Notopterygium Root

General vata pain
Cold damp joint pain
Affinity for upper part of body, shoulders
Caution with low ojas
3-12 grams

41

Ginkgo – circulation, not heating





Acute pain remedies

Salicylates

Aspirin category
NSAIDS
Contained in many plants



White willow

Willow bark

Willow bark (*Salix alba*, *Salix spp.*)
Cold, bitter
Source of aspirin (salicylates)
Pain, fever, inflammation
1 oz. as tea



Meadowsweet

Meadowsweet

Meadowsweet leaf (*Filipendula ulmaria*)
Salicylates
Easy on tummy
15-30+ ml as tincture



California poppy

California poppy

Flower/leaf
Opioids
Pain, sleep, anxiety
Up to 1 oz. as tea
Tincture as needed



Corydalis ambigua
Yan hu suo (延胡索)

Corydalis

Warming
Opioids
Main Chinese medicine for pain
Moves blood and qi
Pain, sleep, anxiety
Up to 1 oz. as tea, capsules



Poppy Seed

Opioids
Pain, sleep, anxiety
Up to 1 oz. as tea



Cayenne

Slow acting
Blocks Neurotransmitter
Substance P ("P" for Pain) in neurons
Gradually adjust dose to digestive tolerance

Cayenne Blocks Substance P



59



Asarum (wild ginger)

Asarum sieboldi
Releases exterior
Disperses cold
Vata body, joint pain
Powdered root 1-4 g qd

Mildly warming analgesics (vata)



Guggul resin
Deep detoxification

64



Standardized extract
Guggulsterones

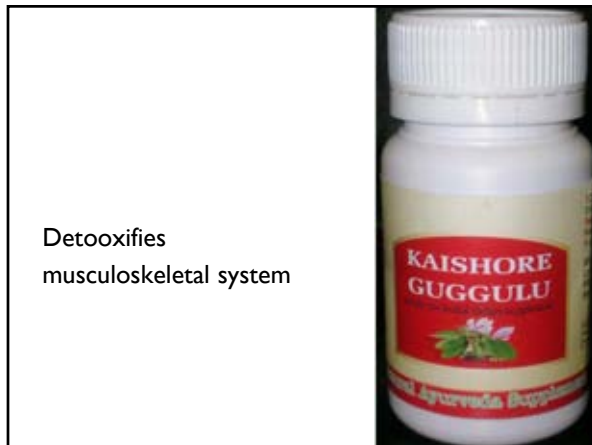




Yograj Guggul

Vidanga	Coriander
Ushir (Vetiveria zizanoides)	Triphala
Devdaru (Cedrus deodara)	Trikatu
Ajwain	Musta
Chavya (Piper chaba)	Purified Guggul
Cardamom	Chitrak
Gokshura	

68



Kaishore Guggul

Main ingredients:

- Triphala
- Guduchi
- Guggul

Trikatu (Ginger, Black pepper, Pippali)

Vaividanga

- Jaipal (Croton tiglium root)
- Nishotha (Indian turpeth root)
- Castor oil

70





Feverfew

Cold, bitter
Chronic pain- arthritis, etc.- 2-3 g per day
Begin with 125 mg qd
Titrate to dose that gives best prevention
Acute pain 5 g per day
Caution—digestive distress




Kava

Kava root
Sedating & antispasmodic
Extract, tincture, tea
250 mg total kavalactones per day
(can go much higher)



Kava tincture



Must be top quality

79



80

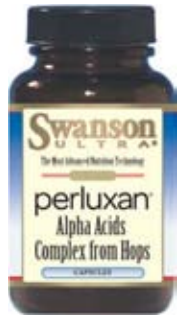
Hops
Extract



81

Hops cones
(*Humulus lupulus*)

Proprietary, standardized
supercritical extract of hops



82

Alpha acid fractions
inhibit inflammatory chemicals

Equiv NSAIDs (ibuprofen)

83

1,000 mg Perluxan = 400 mg ibuprofen
(good GI tolerance)

Inhibits pro-inflammatory markers
prostaglandin E2, COX1 & 2, etc.

84



Mild carminatives
gently increase
digestive fire
↓vata in FMS

Avipattikar Churna

Ginger, Pipali, Triphala, Musta, Vid namak (salt),
Vidanga, Cardamom, Cinnamon, Nishotra
root (*Operculina turpethum*) (purgative),
Rock sugar
3-5 g twice daily with milk or lukewarm water

86



Nishotra (Trivrit)
Morning glory family

Fibromyalgia

Low ojas (vitality)
High vata disease
Pain hypersensitivity
Cold, dry, aging
Triggering event
Basic approach is warmth, diet, rest
Total lifestyle makeover
Detoxify before rebuilding regime

88

Fibromyalgia

Condition of widespread muscular pain & fatigue
Diagnostic standard just lists of symptoms
Syndromic diagnosis

Constellation of chronic symptoms Fibromyalgia

Deep aching in the muscles
Burning
Stabbing
Throbbing pains
Profound, draining fatigue, muscular weakness

All same syndrome

Fibromyalgia
Chronic Fatigue Immune Dysfunction Syndrome
(CFIDS, Chronic fatigue)
Myalgic Encephalopathy (Europe)

91

Fibromyalgia

70% FMS patients
symptoms consistent with diagnosis of IBS

Fibromyalgia

Bottom line:
History widespread pain
11 of 18 tender point sites—digital palpation
(Not trigger points)

Syndrome

Signs & symptoms consistent between patients
Symptoms list so long, quite possible 2 different
people share very few symptoms, yet both
have diagnosis
Diagnostic standard just lists of symptoms

94

Background

3 to 6 million Americans living with FMS

- U.S. government

Background

FMS affects ~2% population in USA
Some sources, including Dr. Andrew Weil, put
prevalence at more like 5%

Background

Over 5% of patients in general medical practice

Population	Prevalence %
900 randomly selected individuals, 50-70 y.o.	1.0
Family practice clinic	2.1
200 consecutive general medical patients	5.0
General medical clinic	5.7
Hospitalized patients	7.5
Rheumatology clinic	14.0
Rheumatology clinic	20.0

98

Background

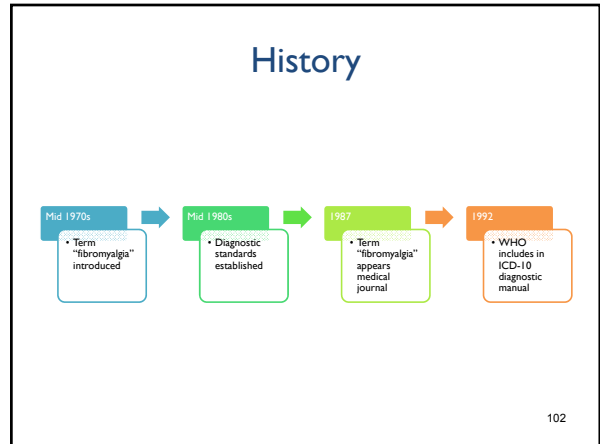
Prevalence much less every other part of world
 1% Britain and Scandinavia
 7-10 times more frequent in women than men

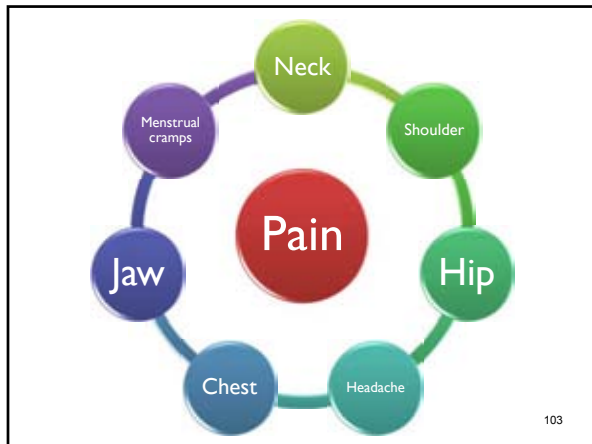
Background

10-30% rheumatology consultations N America

Background

Median age at onset 29 to 37 years
 Median age at diagnosis 34 to 53 years
 (10 year average gap)





But any part of the body can be affected!

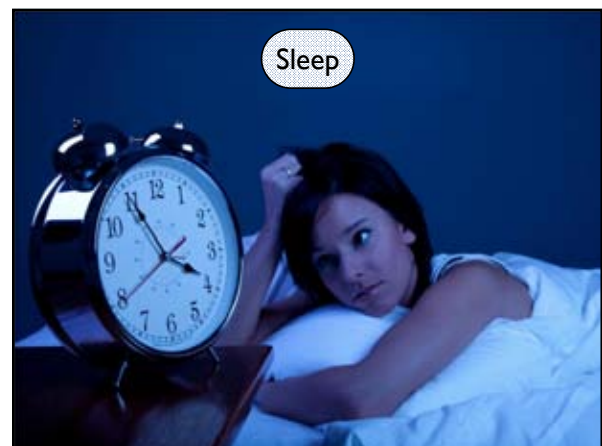
104

Symptoms

- Fatigue
- Sleep & energy disturbances ~90% of patients
- Restless legs (twitchy, painful, cramping)
- Irritable bladder
- Nocturnal myoclonus (jerky muscles)
- Fibro-fog
 - confusion, memory lapse, word mix-ups, concentration difficulties

Signs and Symptoms	% of patients
widespread pain	97.6
tenderness in > 11/18 tender points	90.1
fatigue	81.4
morning stiffness	77.0
sleep disturbance	74.6
paresthesias	62.8
headache	52.8
anxiety	47.8
dysmenorrhea history	40.6
sicca symptoms	35.8
prior depression	31.5
irritable bowel syndrome	29.6
urinary urgency	26.3
Raynaud's phenomenon	16.7

106



Sleep

Sleep disorder (or sleep that is not refreshing)
Exhausted, yet insomnia
Awake at 3:00 A.M.

109

Normal Sleep

5 Stages:

1. Alpha (Chatty mind)
2. Unconscious
3. Delta (Restock the shelves)
4. Deep Delta (Take out the trash)
5. Rapid Eye Movement (REM) (Dreams)

110

Sleep disturbances

Trouble falling or remaining asleep
Waken unrefreshed
Absence of **Delta stage** = ↓ healing hormones
Immune dysfunction
Pain
Body does not repair cells

111

Musculoskeletal



Musculoskeletal

Myoclonus (restless legs)
Morning stiffness (waking up stiff and achy)
Joint aches
Post-exertional malaise and muscle pain
Feeling of joint swelling

113

Neurological

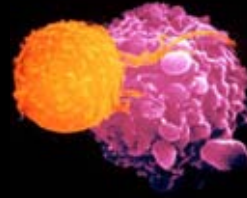


Neurological

Chronic headaches (tension-type or migraines)
Jaw pain (including TMJ dysfunction)
Numbness & tingling sensations
Dizziness or lightheadedness

115

Immune



Sensitivities

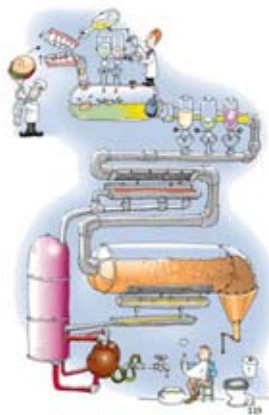
Chemical
Odors
Bright light
Noise
Food
Weather changes
Medicines
Chronic "flu-like" symptoms

117

Skin

Skin sensitivities (sensitivity to cold)
Skin color changes

Digestion



Gas!



120

Digestive

Alternating constipation & diarrhea
"Irritable Bowel"



Genitourinary



Genitourinary

Bladder irritability, bladder pain
Urinary frequency with strong urging
(strongly comorbid w/ Interstitial Cystitis)
Vulvodynia
Pelvic pain, painful sexual intercourse

123

Cognitive

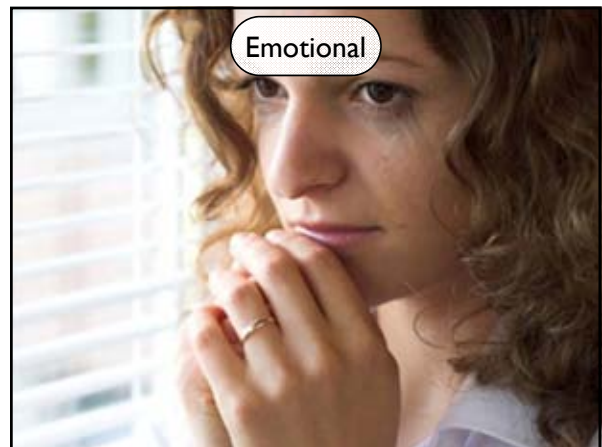


Cognitive

Confusion (Brain Fog)
Memory impairment

125

Emotional



Emotional

Anxiety
 Depression
 Symptoms, or Effects?

127

Associated Conditions

No one can agree on which conditions are:
 Associated
 Comorbid
 Part of the syndrome

128

Associated Conditions

Reflections of underlying factors that cause disease
 (etiological characteristics)
 Or, might be exacerbating factors

129

Associated

Sleep disorder
 Hypermobility
 Hyperventilation
 Allergy/chemical sensitivity
 Depression
 Fatigue
 Anxiety
 Infections
 Irritable bowel syndrome
 Thyroid dysfunction and trauma (particularly whiplash)
 Tension headaches
 Migraine
 Premenstrual tension syndrome
 Cold intolerance
 Restless leg syndrome

130

More

Raynaud's
 Hyperventilation
 Allergy
 Chemical Sensitivity
 Menstrual cramping
 Hypoglycemia
 Candida (Yeast overgrowth)
 Leaky Gut
 Interstitial cystitis

131

Typical Patient

Conventional
 40 year old female, history
 of insomnia, recent
 traumatic episode



132

Ayurveda

Vata constitution
 Dry
 Thin of frame
 Not necessarily underweight
 Often overweight, lack of activity
 Cold
 Lifetime constipation



133

Alternative Medicine

Usually some underlying pathology, chronic virus, immune system deeply involved, caretakers



134

Causes

135

Causes

☆ Sleep disorders ☆

Biomechanical Trauma—physical
 Structural (hypermobility, postural, trauma)
 Functional (overuse hyperventilation)

136

Precipitating Events

Chronic sleep disturbance (care givers)
 Flu-like illness
 HIV infection
 Lyme disease
 Physical trauma (whiplash injury)
 Emotional trauma
 Medications, steroid withdrawal
 Persistent stress

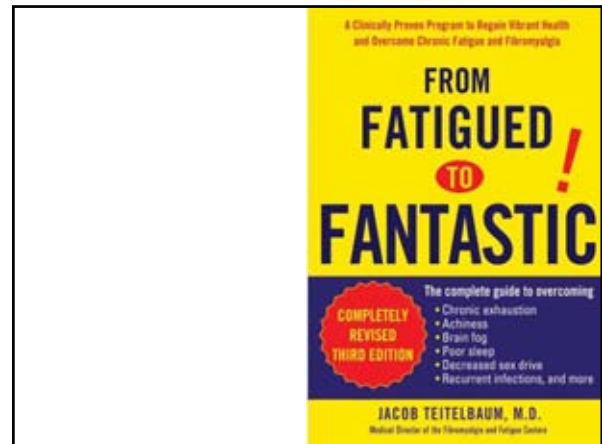
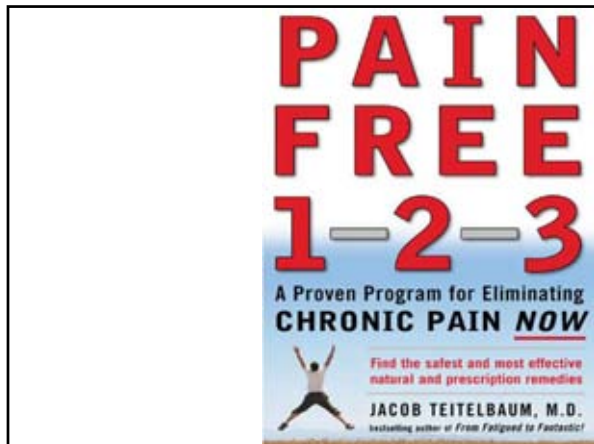
137

Jacob Teitelbaum, M.D.

Internist
 Medical Director of the
 Fibromyalgia and Fatigue
 Centers of America



138



141

Jacob Teitelbaum, M.D.

Research →mitochondrial, hypothalamic dysfunction common denominators

Marked hypothalamic disruption
(Hypothalamus as “circuit breaker”)

Energy stores are depleted

Hypothalamic dysfunction occurs early on

142

Jacob Teitelbaum, M.D.

Resulting in:

- disordered sleep
- autonomic dysfunction
- low body temperatures
- hormonal dysfunctions

143

Jacob Teitelbaum, M.D.

Inadequate energy stores in muscle →

Muscle shortening (think rigor mortis)

Pain, further ↑by loss of deep sleep

144

Jacob Teitelbaum, M.D.

Restoring adequate energy production,
eliminating stresses that over-utilize energy
(e.g.-infections, situational stresses, etc.)
Restores function in
hypothalamic “circuit breaker”
allows muscles to release
allowing pain to resolve

145

Jacob Teitelbaum, M.D.

Placebo controlled study
91% of patients improve
Average 90% improvement in quality of life
3 months, majority no longer qualified as FMS

146



FMS: Classification

American College of Rheumatology: 1990

Both criteria must be satisfied

History (>3 months)
widespread pain 2 of 4 quadrants
Left and right sided
Above and below waist
Axial skeletal pain (cervical spine or anterior chest or
thoracic spine or low back) must be present
Pain (not tenderness) on digital (4 kg) palpation in
11 of 18 tender points

148

Produces no obvious laboratory signs

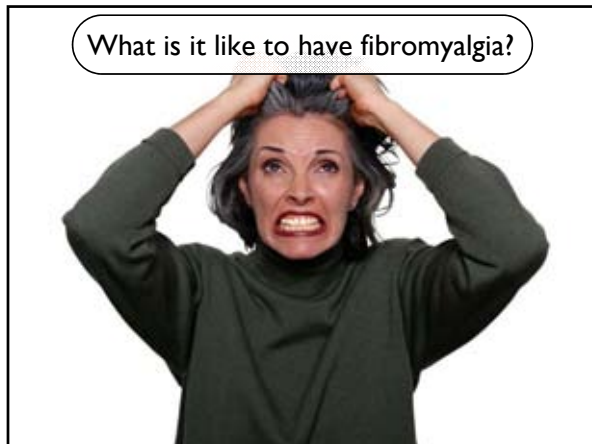


Physical Exam

Examine using thumb with force that just makes
thumbnail blanch (4 kg, 9 lbs.)



150



What is it like to have Fibromyalgia?

“My body feels like it’s screaming!”

“Imagine that last night you drink two glasses of wine more than you would have liked, but no water, and eaten no food. You went to bed late, and got up early. You are stiff, achy and tired—all the time.”

- Chanchal Cabrera, AHG

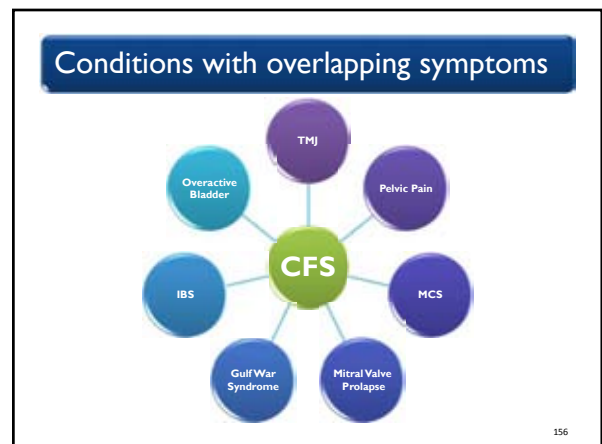
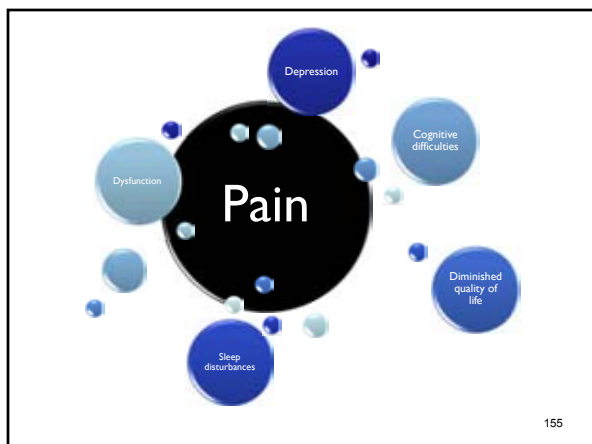
Tender Points

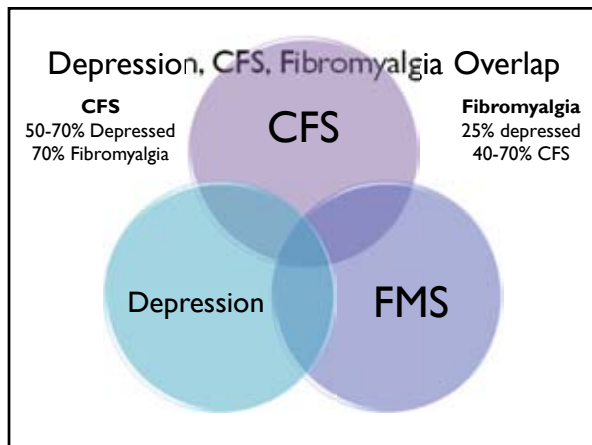
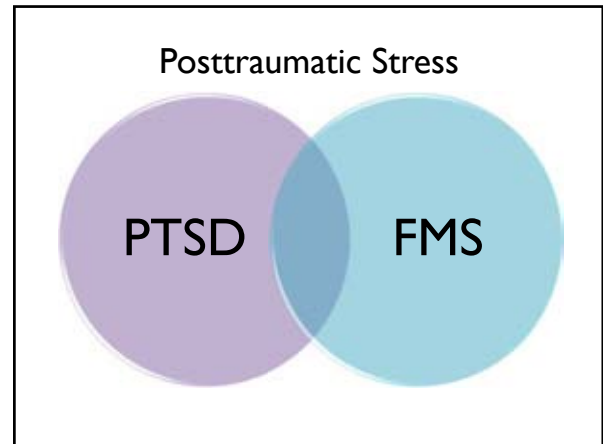
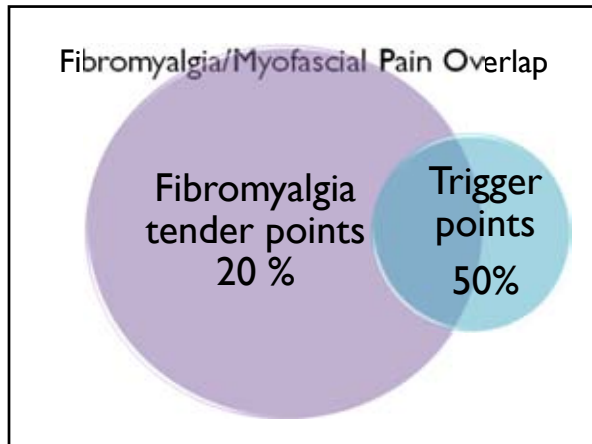
Tender Point count/intensity can vary day to day
 Degree tender point pain predicts functional limitation
 Correlation is very far from perfect
 Individuals <11 of 18 may still have severe functional limitations (Chronic Pain Syndrome)
 Cut-off between “fibromyalgia” & “chronic pain syndrome” is arbitrary

FMS: How is it treated?

Arthritis Foundation: 2003

Education (understand and manage)
 Relaxation (ease tension and anxiety)
 Exercise (flexibility and CV fitness)
 Drugs (decrease pain and improve sleep)
 Antidepressants (tricyclics, SSRIs)
 Benzodiazepines





Comparison of CFS and FMS

	CFS	FMS
Type of Disorder	Syndrome Illness	Syndrome Illness
Prevalence	1 million	3-6 million
Women: Men	4:1	4:1
Diagnosis	Case Definition Dx of exclusion	Tender Points Dx of exclusion

160

Comparison of CFS and FMS

	CFS	FMS
Major symptoms	Chronic fatigue Non-restorative sleep	Chronic pain Tender points
Goal of Treatment	Manage symptoms	Manage symptoms
Prognosis	Restore good health	Restore good health

161

Mainstream primary care providers

Help patient reach improved level of functioning

162

Natural Healing Perspective

Help patient get well and resume a healthy life

163

Integrated Management

Integrated Management

Many people have been cured
 Pain does not mean not to move
 Get good, long, deep sleep
 Holistic lifestyle support
 Multidisciplinary therapies- body, mind, spirit
 Incremental, gradual pace of improvement and change

165

Oily therapies

Diet
 Oily massage (Abhyanga)
 Enema
 Massage—limited short term benefit

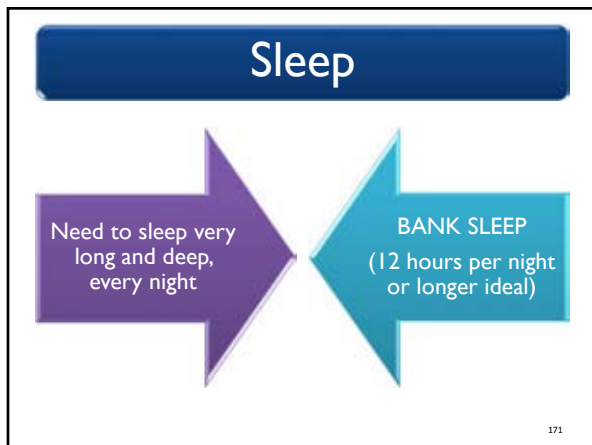
Day to Day

Expect Relapses
 (Exercise half capacity)
 Addressing
 “pain behavior”
 Psychological support

Khalsa's THRIVE Approach

T	• Touch
H	• Herbs & Hormones
R	• Rest, Rebalance, Sleep
I	• Immunity
V	• Vitamins & Nutrition
E	• Exercise

168



L-Theanine

Teitelbaum favorite
Amino acid from green tea
100- 400 mg at bedtime

Melatonin

- Sublingual
- Sustained Release
- Commonly 1-2 mg per pellet
- 1-10 mg bedtime

173

5-HTP

(5 Hydroxytryptophan)
Tryptophan metabolite
200 to 400mg at bedtime

174

L-Tryptophan

Sedating amino acid
500-2000 mg at bedtime



Sleep herbs



Ye Jiao Teng

Stem of *Polygonum multiflorum*
(Root is ho shou wu)
Exceptionally effective
Rapid acting
Well tolerated
Tea- 15 grams at bedtime

177



Nutmeg



Nutmeg


Myristica fragans
Dried kernel of seed
1-5 grams at bedtime

180



Massage and Bodywork

Most mentioned beneficial therapy by patients
 Many fibromites
 twice per week massage enables normal function
 Does not cure FMS
 Helps hypoxia
 Temporary symptomatic benefit
 Expensive



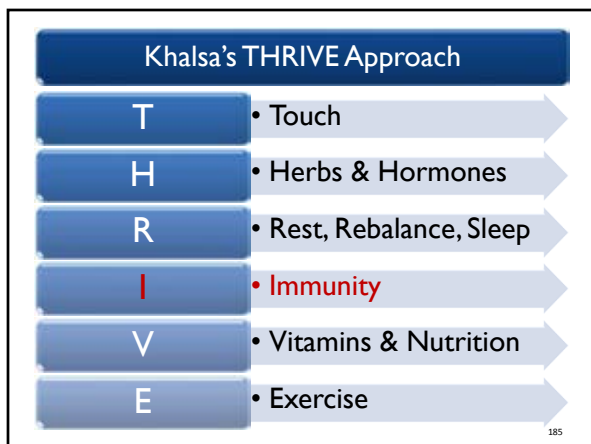
182



Biofeedback

Decreases the number of tender points, overall pain intensity, and morning stiffness
 Benefits last up to six months
 Greater effect combined with relaxation training

184



Reduce Acute Immune Burden

FMS/CFS may be infectious in origin
 Some % of cases triggered by immune episode
 Opportunistic infections present

186

Reduce Acute Immune Burden

Treat current extant chronic & acute infections

Often history of excessive antibiotic use

187

Opportunistic infections in CFS/FMS

Yeast
 Chronic URIs
 Sinusitis
 Bowel infections
 Chronic, low-grade prostatitis
 Fungus

188

Then, Reduce Chronic Immune Burden

Adaptogens
 Slow acting immune enhancers
 Bowel probiotics
 Empiric trial of antifungal therapy

189

Khalsa's THRIVE Approach

- T • Touch
- H • Herbs & Hormones
- R • Rest, Rebalance, Sleep
- I • Immunity
- V • **Vitamins & Nutrition**
- E • Exercise

190

Nutritional Supplements

Assess for deficiencies
 Provide broad support as needed

191

Megapotency multiple vitamin



Vitamin D

Strong association pain syndromes
Northern latitudes 10,000 IU per day +

193

Vitamin D Functions in Human Health

Is fibromyalgia just a vitamin D deficiency?
Autoimmune connection
Mood connection
Rickets accompanied by muscular weakness

194

Magnesium



Magnesium

Fibromyalgia preventive
Co-factor over 350 biochemical reactions—
energy production, bone formation, muscle
function and relaxation, protein synthesis

196

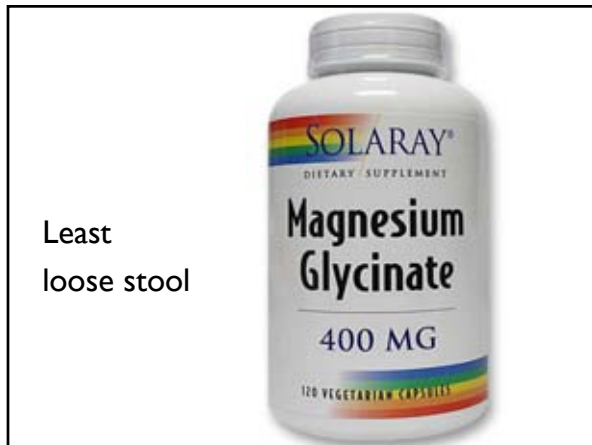
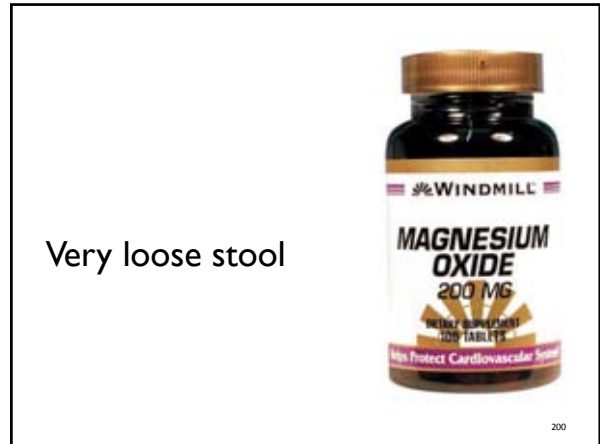
Magnesium

Studies- 90-95% of the U.S. population deficient
Most American adults not get RDA 400-500 mg

197

Inflammation

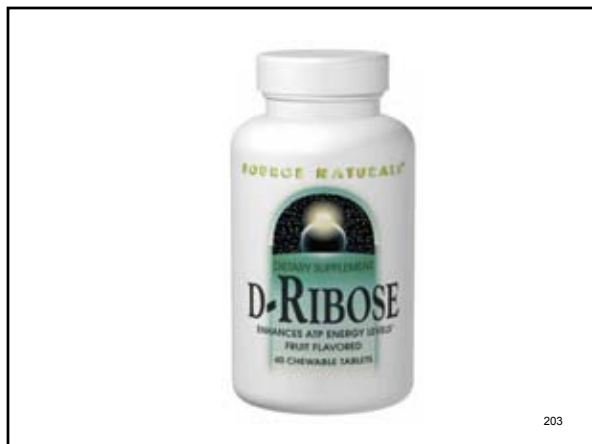




Magnesium

Required by specific enzymes that produce Adenosine Triphosphate (ATP)
Bowel tolerance dose (~1200 mg)

202



Ribose

Ribose (d-ribose)
Naturally occurring five-carbon sugar
Found in all living cells
Carbohydrate backbone, cells' energy molecules

204

Ribose

Teitelbaum—senior author very promising ribose study
 41 FMS patient feasibility study
 Patient age & gender corresponded to FMS population
 5 grams ribose orally, tid, average 28 days

205

Ribose

12 days, 66 % significant improvement in energy, sleep,
 mental clarity, pain intensity, well being
 44% average increase energy, 30% increase well-being
 Averaged 25% improvement in quality of life

206

Ribose

3-5 g qd provides muscle cells adequate supply
 FMS—10 to 20 grams or more per day
 Contemporary protocols (Teitelbaum)
 Start 5 grams qd
 Titrate dose ↑ 3-5 g qd → best subjective level

207

L-Tyrosine



208

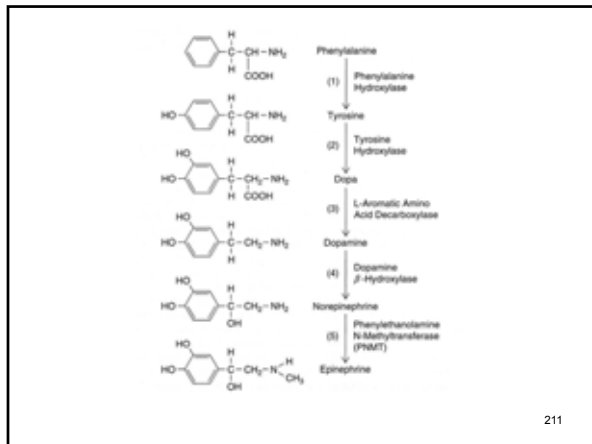
L-Tyrosine

Or, Phenylalanine
 Energizing
 Use in AM (not late, ad lib)
 500-3,000 mg per day

209



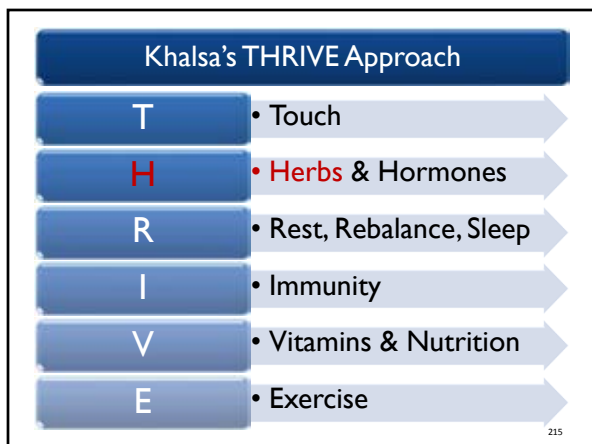
210



Supportive Treatment

Activity is important to quality of life & recovery
 Highly individualized
 Paced
 Avoid overexertion
 Balance—prevent “boom or bust” cycles
 Referral to physical therapist or occupational therapist

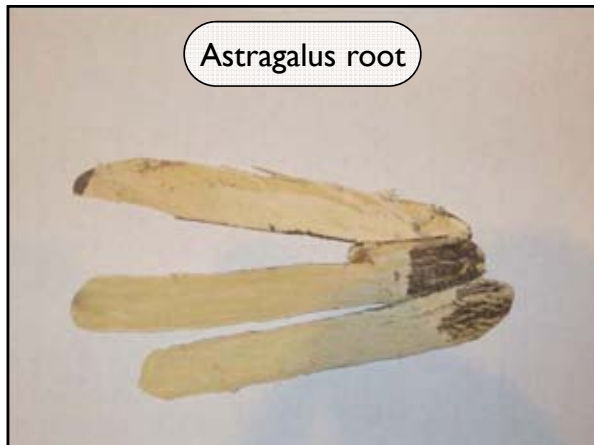
214

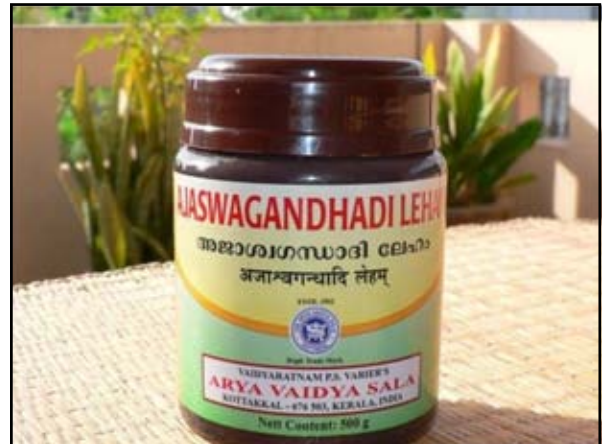


Tonic herbs build balanced health

Amla	Guduchi
Punarnava root	Licorice
Vidarikand	Pipali
Bala	Shankpushpi
Shatavari	
Ashwaganda	
Brahmi	

216





Agastya Rasayanam

Geriatric formula

- Dashmula
- Shankapushpi
- Bala
- Pipalimul
- Chitrak
- Elecampane
- Ghee
- Pipali
- Haritaki
- Etc.

226



Narasimha Rasayanam

Antiaging, especially pitta wasting

- Bringraj
- Triphala
- Milk
- Ghee
- Shatavari
- Etc.

228



Brahmi Ghritam

Ghee
Brahmi
Trivrit
Shankapushpi
Etc.

230



Dipsacus

Dipsacus root (*Dipsacus asper*)
(Xu Duan)
Chinese teasel
Pillar TCM joint therapy and traumatic injury
The “arnica of Chinese Medicine”
Broad benefit musculoskeletal, trauma, pain
15 grams per day as powder or tea



Nexrutine

(Proprietary)
Extract Amur cork tree bark
(*Phellodendron amurense*)
Anti-inflammatory
Effect from berberine?



235

Nexrutine

Inhibits COX-2 gene expression w/o inhibit COX-1
Broader inhibition pro-inflammatory processes

236

Amur cork tree



Amur cork tree
After harvest



Phellodendron amurense
Huang bai(黄柏)





Nexrutine

Study- faster onset of analgesia than naproxen

370-person open trial

91% reported beneficial effects
pain reduction &/or inflammation
increase in mobility, flexibility

242

Blood Movers

Move blood, treat congealed blood, stop pain
from blood stasis

Ligusticum (Szechuan lovage root, Osha)
Salvia root (Dan shen)
Motherwort
Red peony root
Three edge root (Sparganium)
Ox knee root (Achyranthis)
Artemisia (various)

243



Cham Dang Gui

Cham Dang Gui

Korean Giant Angelica (*Angelica gigas* Nakai)
Similar to dong quai (multipurpose blood mover)
Active decursinol, decursin (multiple manufacturers)
Decursin much high yield than dong quai
Study 70% subjects receiving decursinol
Significant improvement 14 days visual analog scores
(OA, blunt trauma pain)

245

Cham Dang Gui

Decursinol (polyphenol)
Chronic/blunt trauma pain
Antinociceptive action CNS
Possibly essentially anti-inflammatory)
Decursinol 250-1000 mg per day

246

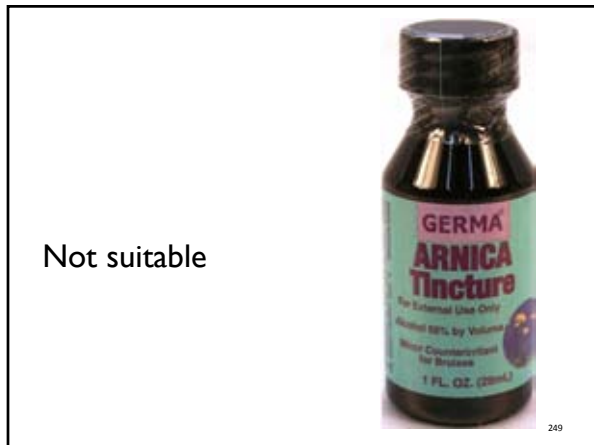


Arnica tincture

Arnica flower

Internal much less toxic than often thought
 Must be suitable for internal consumption
 Tincture 1:10 (traditional pharmacopoeias)
 1-100 drops (1:10) as needed
 Titrate dose
 Overdose
 GI warmth, arrhythmia, nervous stimulation

248



Not suitable



249

Topical Therapies



250



Mineral bath therapy

Mineral Bath Therapy

Improvement all variables, short & middle term
 Improvements in spa group superior to controls
 Fibromyalgia Impact Questionnaire (until 6th month)
 Pain (until 1st month)
 Tender point count (until 1st month)
 Patient's global assessment (end-of-treatment)
 Fatigue (end-of-treatment evaluation)

252



Menthol

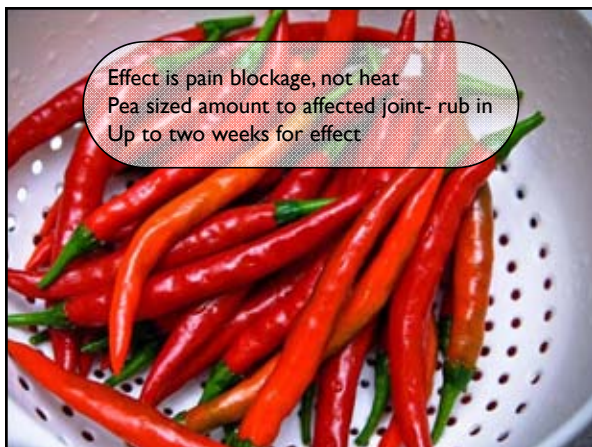
Best result in study
Cooling sensation
Spot treatment
“Ice” Ointments

254

Capsicum

Cayenne ointment
Caution- HOT
Chronic pain

255



St. Johnswort oil
Chronic pain

Arnica

Arnica flower
Herbal, not homeopathic

258



Hormones

1. Assess hormone status
2. Bioidentical hormones

260




Questions

Please type your question into the box in your webinar console

Please limit your questions to the webinar topic

We will answer as many questions as possible





An Association of
Herbal Practitioners

PO Box 230741
Boston, MA 02123
857.350.3128
ahgoffice@earthlink.net

**AMERICAN
HERBALISTS
GUILD**

266