

Myofascial Pain & Fibromyalgia

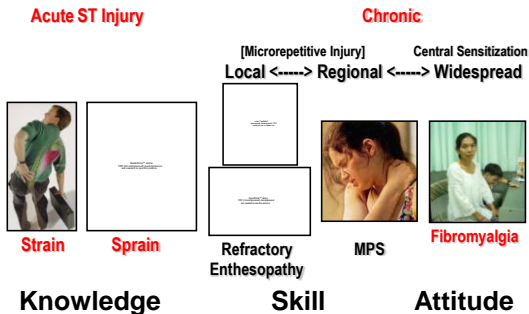
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 President IASP (Thai Chapter)

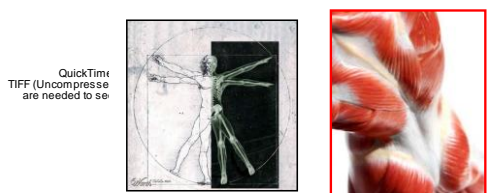
Musculoskeletal Pain

- | | |
|---|---|
| <p>Articular</p> <ul style="list-style-type: none"> ▪ OA ▪ Disc Herniation | <p>Soft Tissue Rheumatism</p> <p style="text-align: center;">Acute</p> <ul style="list-style-type: none"> ▪ Muscle Strain, Ligament Sprain <p style="text-align: center;">Chronic</p> <ul style="list-style-type: none"> ▪ Localize Pain : enthesopathy ▪ Regional Pain : Myofascial Pain ▪ Widespread Pain : Fibromyalgia |
|---|---|

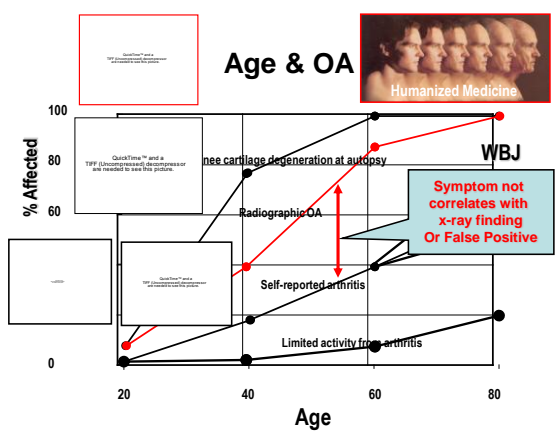
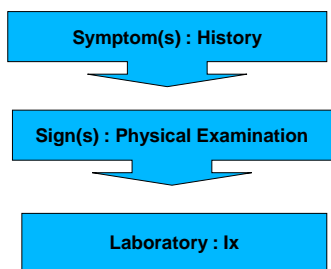
Concept

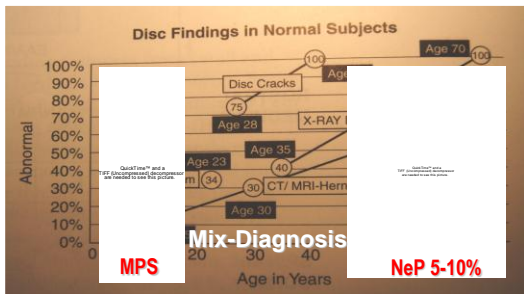


Clinical Diagnosis



Diagnostic

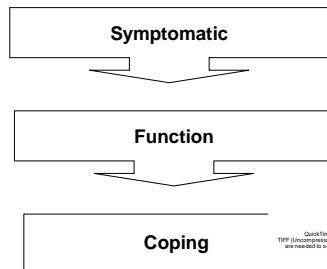




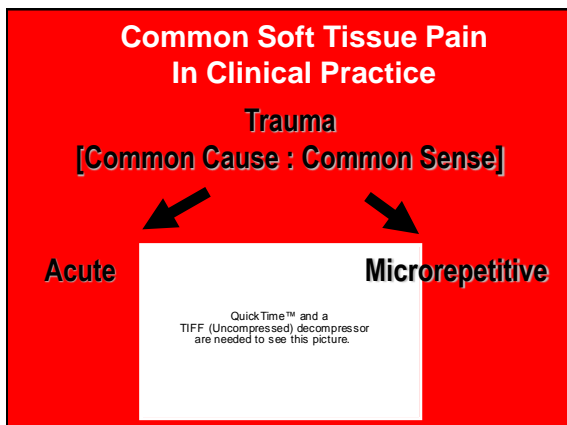
Mis-Diagnosis
False-positive rates for HNP with various imaging modalities.

Bigos S, Muller G. Primary care approach to acute and chronic back problems. Definition and care. In: Lessor JD, ed. Bonica's Management of Pain, 3rd ed. 2001

Treatment



ACUTE



Sport Injury [Acute] RICE

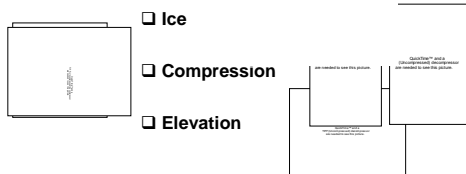
Chronic Sprain

Rest [Absolute/Relative]

Ice

Compression

Elevation



QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture. NSAIDs

Enthesopathy

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Localized Pain

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Myofascial Pain Syndrome

Traditionally defined
Regional pain derived
from myofascial trigger point



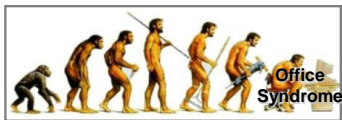
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4

MPS the chronicle

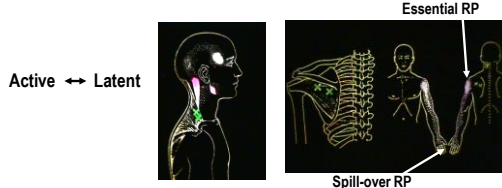


- 👉 Epidemiology : most common chronic pain in clinical practice (NOW)
- 👉 Pathophysiology : exactly unknown: overload principle is favorable
- 👉 Diagnosis : High Touch R/I & High Tech R/O
- 👉 Treatment : TrP eradication (No single standard of the treatment) Find
- 👉 & Fix PPF
- 👉 Prognosis: Best of all in chronic pain syndrome

Clinical Pictures

Myofascial Pain Syndrome & Dysfunction

- ✓ Pain (Bizarre referred pain but specific to each TrP)
- ✓ Autonomic Symptom(s)
- ✓ Associated neurologic symptom(s)



Diagnostic Criteria (R/O And R/I)

Hx : Regional Pain Syndrome
PE : Palpable Trigger Point

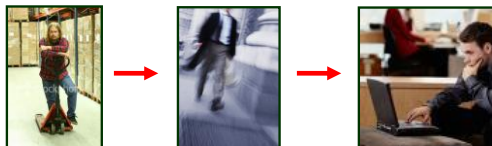


High touch is important as High technology

- Common characteristic of the TrP :
1. Hyperirritable Spot
 2. Reproducible referred symptom
 3. Palpable of Taut band or nodule

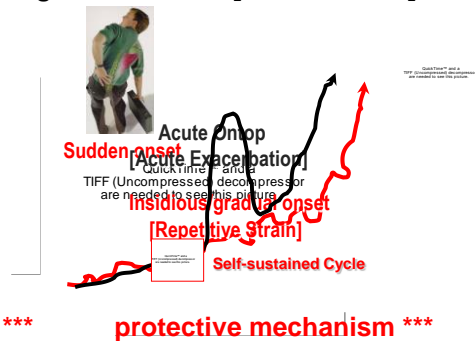
Etiology of Myofascial Trigger Points (Overload Principle)

- Acute Overuse : Traumatic and/or sport-related
- Chronic Overuse : poor posture with microrepetitive trauma



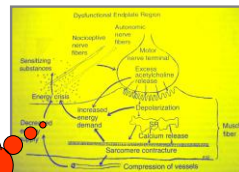
Field Work → Office Syndrome WWW

Regress to [Chronic Acute Strain]

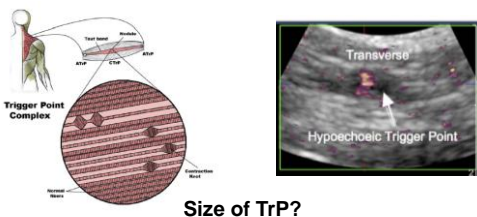


1. Motor end-plate Concept
2. Muscle fiber concept
3. ANS concept
4. Central Sensitization

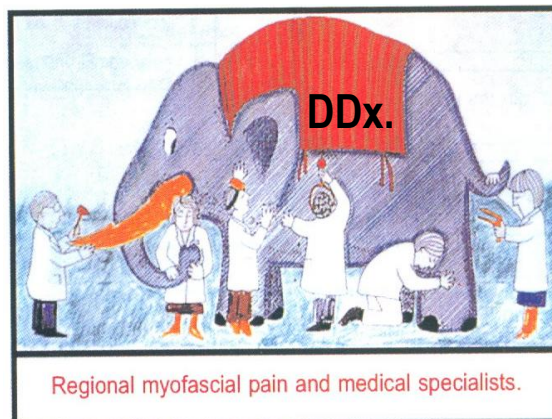
Pathophysiology Trigger Point



Sikdar S, Shah JP, Gebread T, et al. Novel applications of ultrasound technology to visualize and characterize myofascial trigger points and surrounding soft tissue. Arch Phys Med Rehabil Vol 90, November 2009;1629-38.



Myofascial Pain Syndrome



DDx.

Quick Test #1 and #2 (Uncompressed decompressor are needed to see this picture)
Quick Test #3 and #4 (Uncompressed decompressor are needed to see this picture)

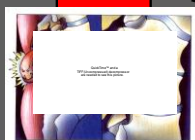
Psychological Pain

Co-morbid Perpetuator

MPS

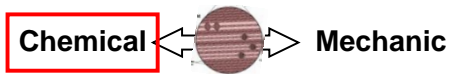
Co-morbid Perpetuator

Neuromusculoskeletal Pain



MPS Management

In practice
MPS is The largest cross-road of
conventional and alternative medicine

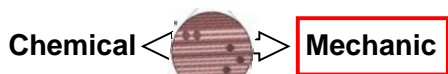


Trigger Point
Eradication
[LOCAL Rx]



Correct
Perpetuating
Factors

Trigger Point Eradication : Short-term goal
Correct Perpetuating Factor : Long-term goal



☞ Stretching

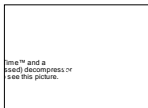


☞ Massage

☞ Dry Needling

And Acupuncture

☞ Trigger Point Injection



Local anesthetic

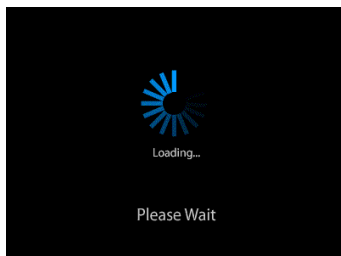
Selected of the patient
For the Rx. Of choice

- Patient preference & compliance
- Contraindication
- Skill of the Therapist

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TIFF (Uncompressed) decompressor
are needed to see this picture.

No Single Standard of the Treatment
Combine is common in practice(Mix & Match)

How long does it last?



The Philosophy of The Perpetuating Factor



Focus Body and Mind

- Physical or/and Mental overload?

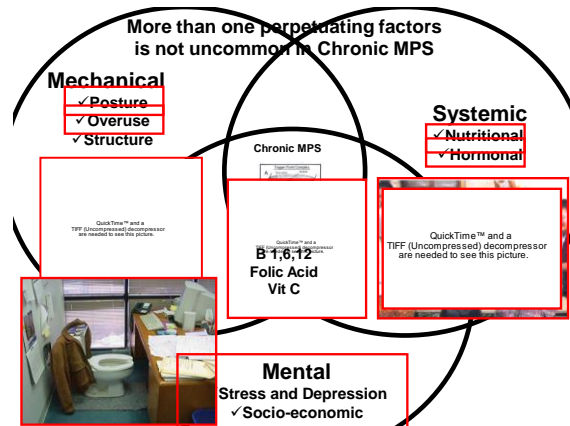


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✉. Psychological Factor

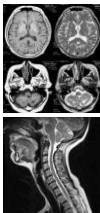
Anxiety and depression increase when related to medical symptoms without identified pathology (Katon et al. 2001)

MPS ↔ Stress & Depress (Cognitive Error) ↔ MPS



Negative Interpretation

Patient? <-----> Physician?



Shall I cure? When?

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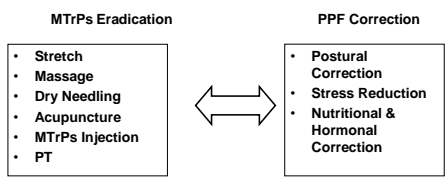
Mechanical
Systemic
Psychological

Multifactor

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

What shall I do?

Treatment



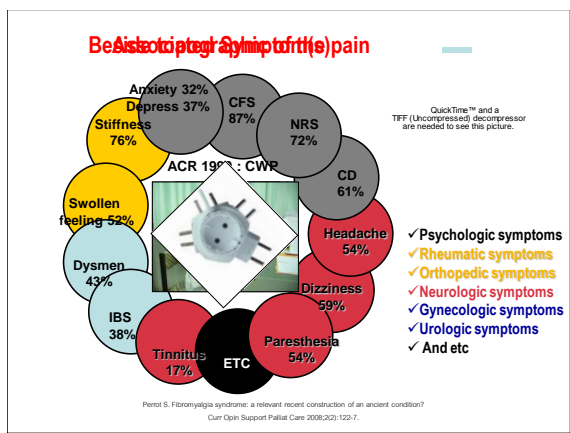
Symptomatic ↔ Palliative ↔ Curative Rx

CWP with associated symptoms
 Characterized by increase pain sensitivity : the extreme end of a spectrum of abnormal pain sensation/processing [Wolfe F, et al. *Arthritis Rheum* 1995;38:19-28.]
 [ICD M 79.0 : Non-specific rheumatic condition]

QuickTime™ and compressed video are needed to see this picture.

FIBROMYALGIA
 Attitude
 Scientific Data

Perrot S. Fibromyalgia syndrome: a relevant recent construction of an ancient condition/Curr Opin Support Palliat Care 2008;2(2):122-7.



Axis I and Axis II Diagnosis in Fibromyalgia Patients and Control Groups [N : 103/83]

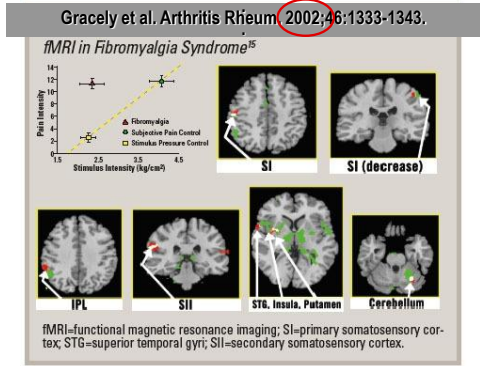
Axis I : Mental Disorder
 MDD 14.6 : 4.8%
 Anxiety Disorders 32 : 10%

Axis II : Personality Disorder
 OCPD : 23.3/3.6%
 Any Axis II disorders 31.1 : 13.3%

Axis III : Medical/Physical Disorder [Chronic Pain]

F Uguz et al. Axis I and Axis II psychiatric disorders in patients fibromyalgia. *General Hospital Psychiatry* 2010;32:105-07.

State of the Science



20% of chronic MPS

1: Unknown [1° FMS]

5: Physical Trauma

5: Psychological Trauma

5: Physical Trauma

4: Concomitant

3: Environmental Predisposition (MCS)

Genetic Predisposition

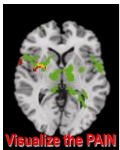
Etiology : Multifactors

Update on Fibromyalgia Syndrome. *Pain Clinical Updates (IASP), Volume XVI, Issue 4, June 2008*

Arthritis Research & Therapy 2006, 8:208.

Pathophysiology

Central Sensitization
(Imbalanced of Nociception)



Visualize the PAIN

Hybrid
[Common]

Staud R. Biology and therapy of fibromyalgia; pain in fibromyalgia syndrome, Arthritis Res Ther 2006;8:208-14.

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.

Wolfe F, Clauw D, Fitzcharles MA, et al. The instability of fibromyalgia diagnosis: associations with measures of severity. Presentation number 86, October 19, (ACR/ARHP Annual Scientific Meeting).

Kossek E, Eklöf J, Hansson P. Increased pressure pain sensitivity in fibromyalgia patients is located deep to the skin but restricted to muscle tissue. Pain. 1998; 63(3):353-9.

20 years later
Wolfe ACR 2010 Criteria
[Fibromyalgia Diagnostic tool]

Associated Symptoms

For Patient

WPI: Widespread Pain Index [0-19]

Which areas have you had pain in the past 3 months? Please check all that apply.

0 = No
1 = Few
2 = Moderate
3 = Great Deal

How many areas have you had pain?
WPI = []

Symptom Severity (SS) Scale Score [0-12]

(This scale measures the frequency of pain, sensory symptoms, and physical symptoms, and the total severity of the selected symptoms in general.)

How many of the following symptoms have you had in the past 3 months?

Symptom	No. of times in the past 3 months	0	1	2	3	4
Tender points	0	1	2	3	4	5
Morning stiffness	0	1	2	3	4	5
Waking and/or trouble sleeping	0	1	2	3	4	5
Other associated symptoms						
- Irritable bowel syndrome	0	1	2	3	4	5
- Irritable bladder	0	1	2	3	4	5
- Headaches	0	1	2	3	4	5
- Dizziness	0	1	2	3	4	5
- Fatigue	0	1	2	3	4	5
- Tingling or numbness	0	1	2	3	4	5
- Swollen joints	0	1	2	3	4	5
- Anxiety	0	1	2	3	4	5
- Depression	0	1	2	3	4	5

Total SS score []

For Physician

Satisfies diagnostic criteria for fibromyalgia if the following 3 conditions are met:

- I. WPI ≥ 7 and SS scale score ≥ 5 or WPI 3-6 and SS scale score ≥ 9.
- II. Symptoms have been present at a similar level for at least 3 months.
- III. The patient does not have a disorder that would otherwise explain the pain.

Meet the criteria Yes No

This criteria correctly classifies 88.1 % of patients.

CWP prevalence = 10% of population
Fibromyalgia = 2%
Differential Dx. (Exclusion)

Hx. And Clinical Picture

Screening
Subtle/Sub-clinical

Mechanical overuse

Drugs

- Statins and fibrates
- Antimalarials

Rheumatologic diseases

- Rheumatoid arthritis
- Systemic lupus erythematosus
- Sjögren's

Endylitis reumatica

RP, CPK tivity

psoriasis

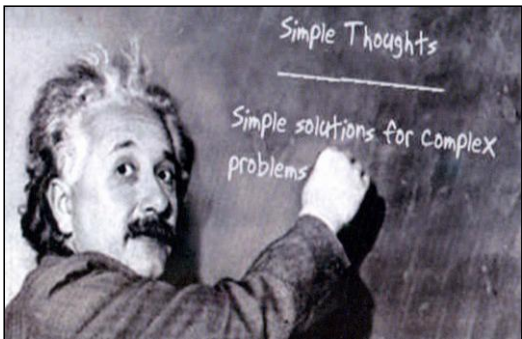
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amin D

Regional pain syndrome

http://www.primarypsychiatry.com/asp/articleDetail.aspx?articleid=2484

Management



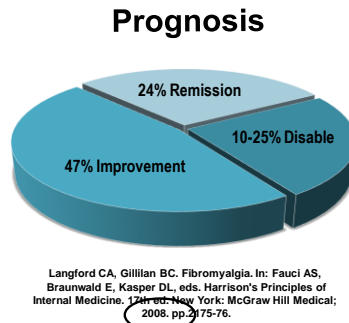
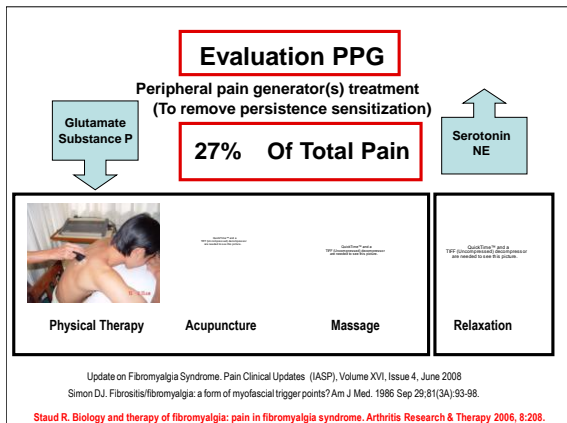
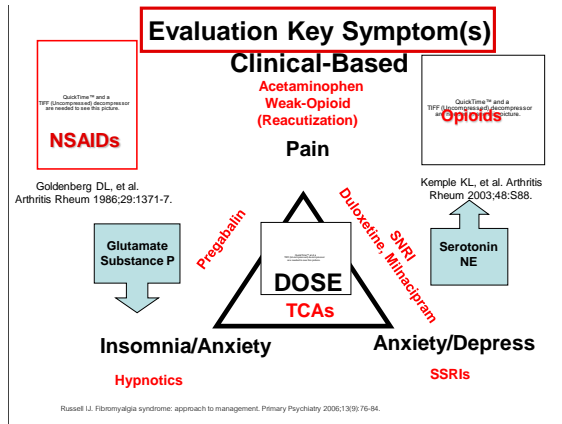
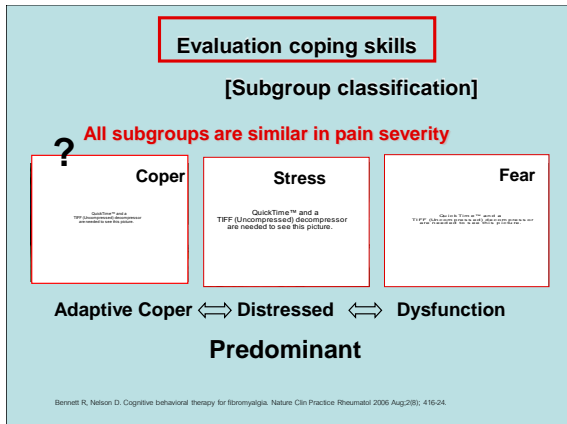
ssag

[Outcome of Mixed Result]
Common phenomena in Heterogenous Condition
I: Key symptom(s) II: PPG III: Coping skill

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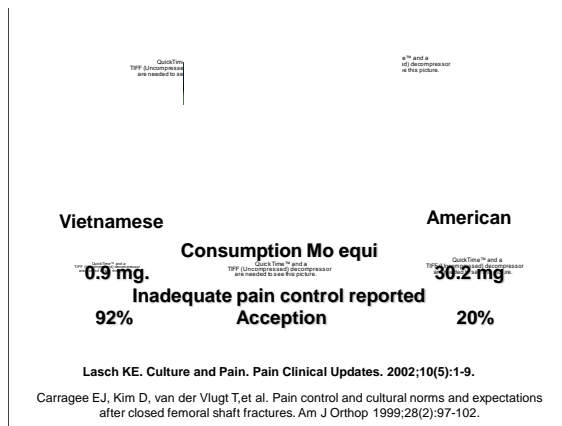
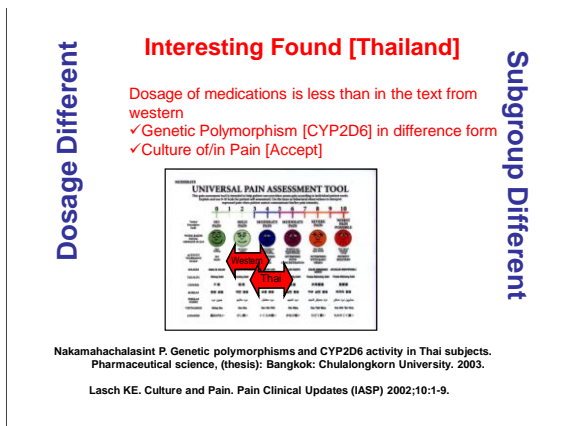
Patient Evaluation

1. [unclear]
2. Update on Fibromyalgia Syndrome. Pain Clinical Update (ASPM) 2008 Jun 30(4).
3. Bennett R, Nelson G. Cognitive behavioral therapy for fibromyalgia. Nature Clin Pract Rheumatol 2008 Aug 2(8): 416-24.



Community Hospital

NB : 2 years follow up, Go slow, Nature of the disease



Conclusion

Sudden ST Injury

Acute -----



Strain



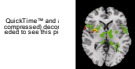
Sprain



Knowledge



Skill



Attitude