

Novel Physiotherapy Conference Chicago

17 – 19th August 2015

Adapted Reflextherapy in Spinal Pain including Whiplash

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Objective:

1. Explain Adapted Reflextherapy (AdRx)
2. Rationale
3. Application
4. Evidence

AdRx is:

“A task-specific, manual, topical stimulation of short duration to the feet according to the principles of reflexology”



AdRx :

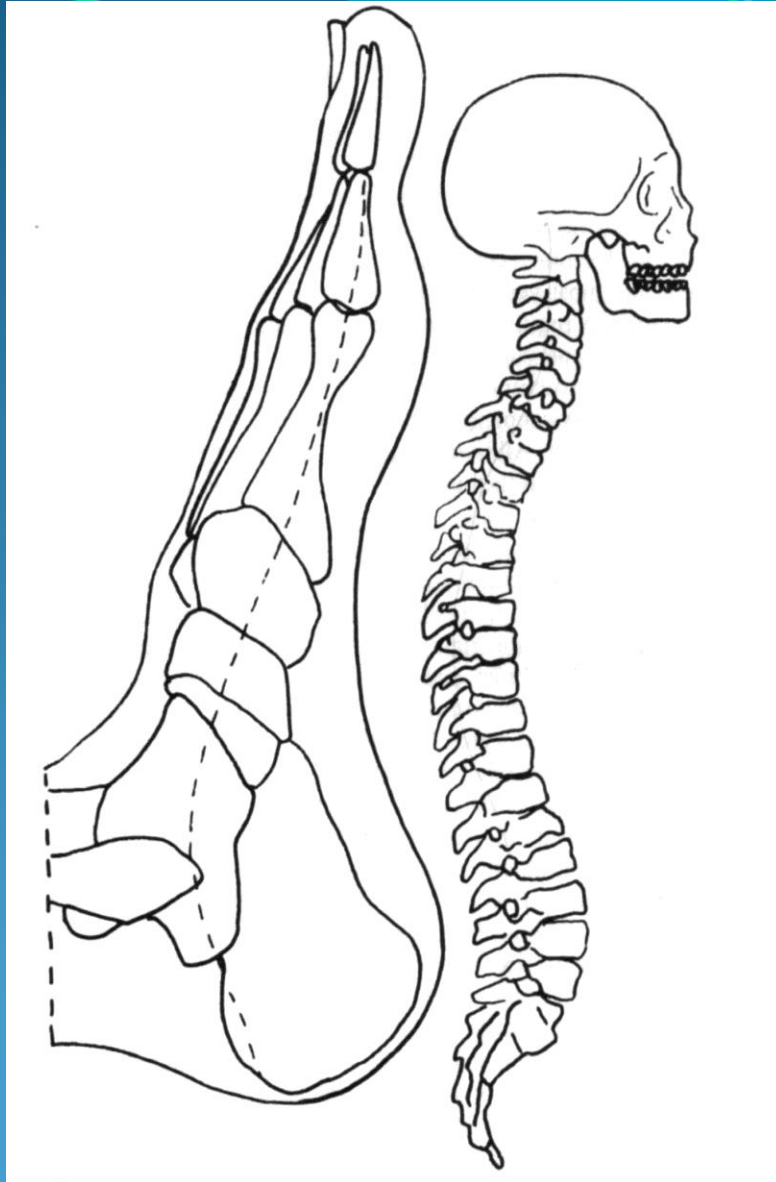
**Physiotherapy Tool to assess and treat
MSK patients for <20 years**

Post-injury:

- **Hypersensitivity**
- **Unresolved Pain**
- **Bizarre pain patterns**

**Zone Therapy/Reflexology/
Reflexotherapy/ Reflex Zone Therapy/
Manual Neurotherapy /
Nerve reflexology/
Adapted Reflextherapy**

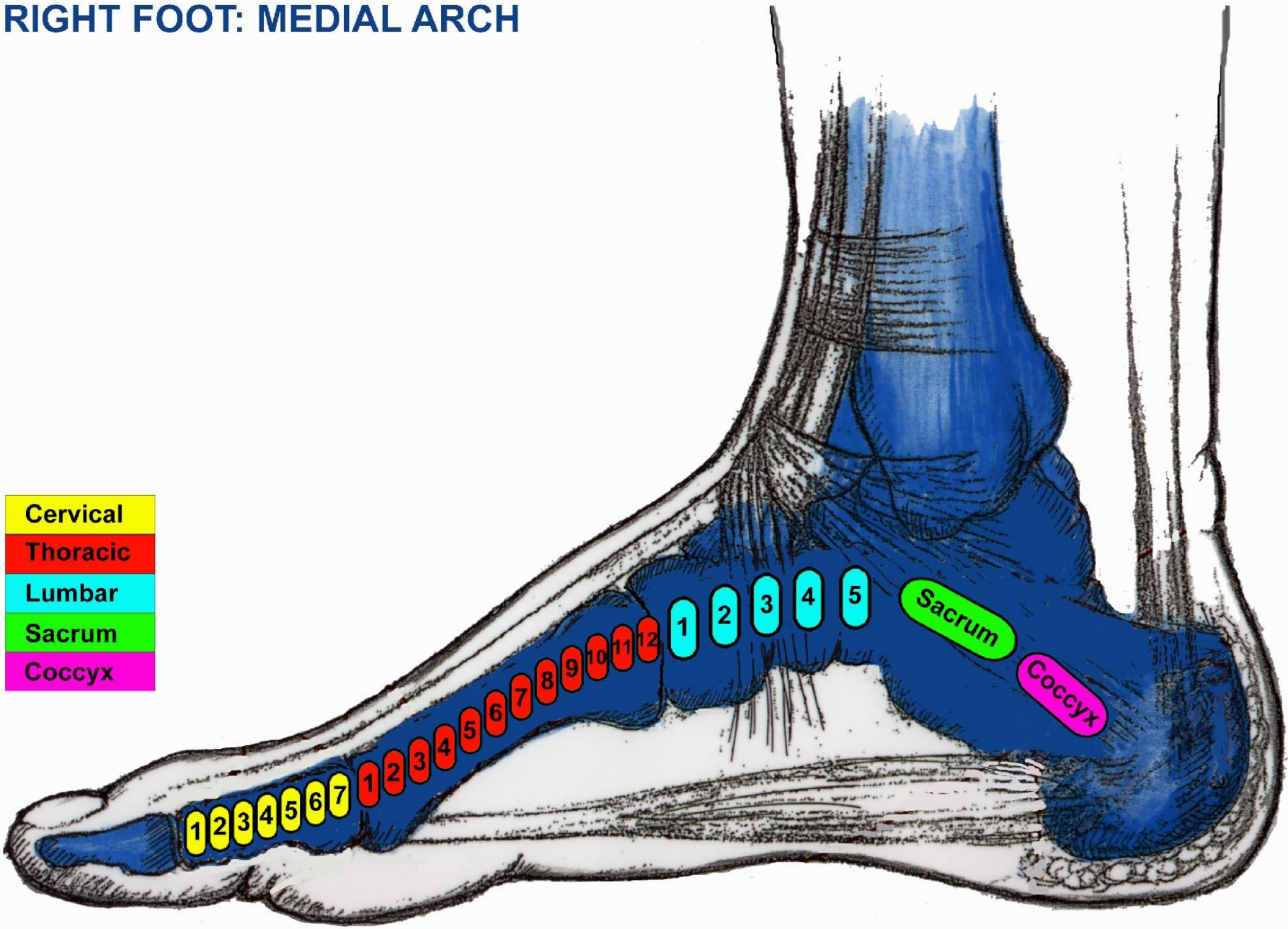
William Fitzgerald	1905 USA
Eunice Ingham	1938 USA
Doreen Bayly	1960's United Kingdom
Hanne Marquart	1970's Germany
Christine Jones	1976 United Kingdom
Robert St John	1976
Gunnel Berry	2000
Ann Lett	2000
Nico Pauli	2000 Belgium

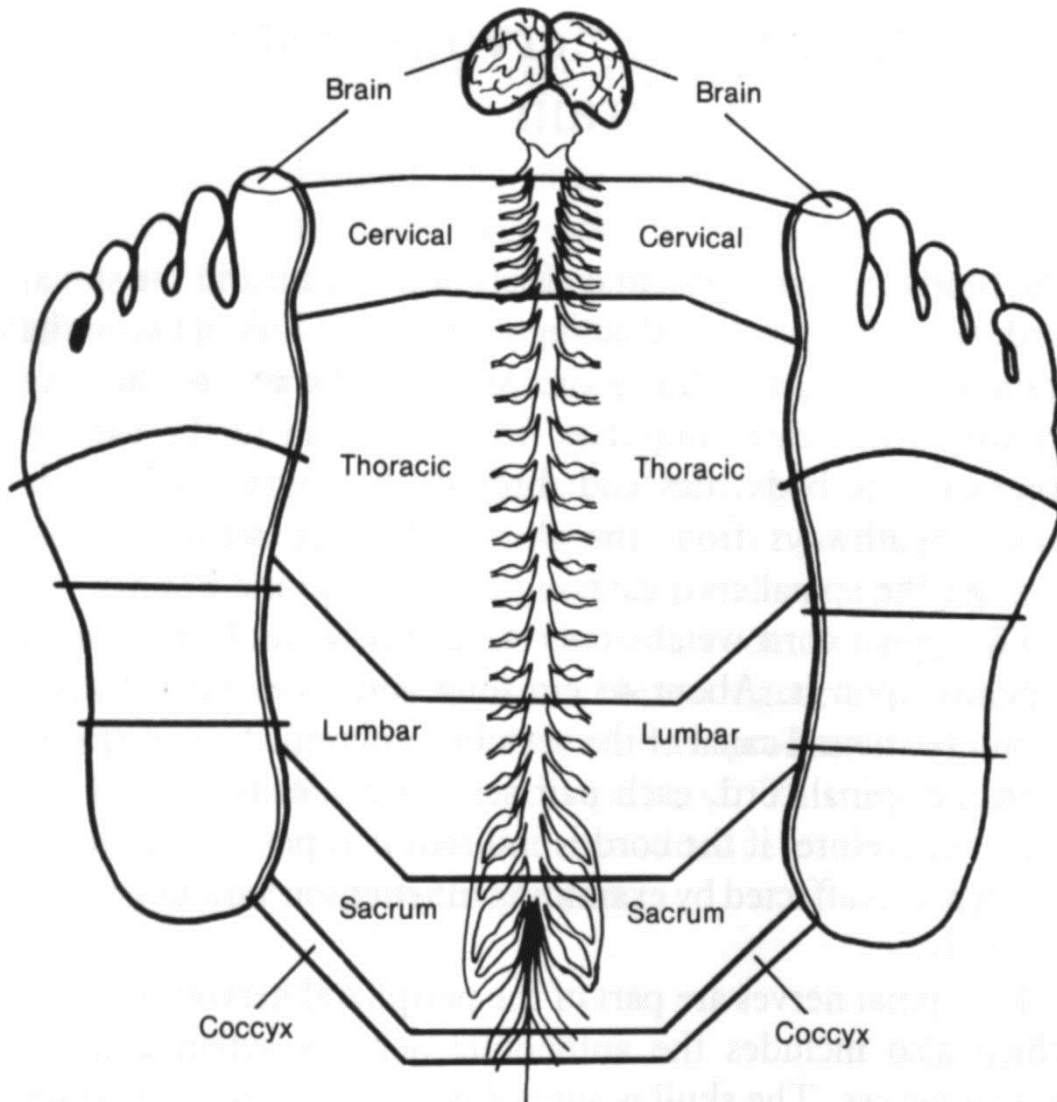


Robert St John. *Metamorphosis*, 1976
Gillander A, *The ancient answer to
modern ailments*. 2002

RIGHT FOOT: MEDIAL ARCH

- Cervical
- Thoracic
- Lumbar
- Sacrum
- Coccyx





Robert St John. *Metamorphosis*, 1976
Gillander A, *The ancient answer to modern ailments*. 2002

AdRx Techniques

- **Walking**
- **3-point Adapted Reflextherapy**
- **Twisting of the 'spine'**
- **Linking**
- **Thro'/thro'**



AdRx Inclusion Criteria

- Spinal pain
- Peripheral pain
- Whiplash injury symptoms
- Any age/any longevity
- (Spinal surgery)

AdRx **Exclusion** Criteria

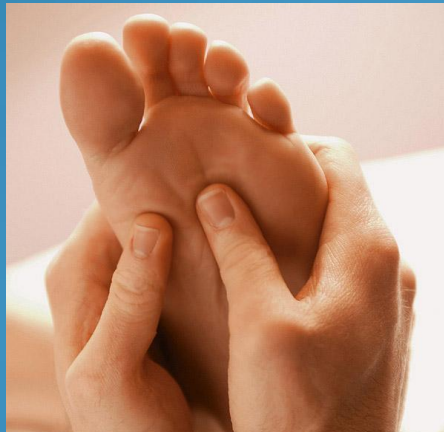
- **Red flags**
- **Discogenic origin**
- **Transplants**
- **Fever**

2. Rationale of AdRx

'Pedal' homonculus

Sensory input acts as a counter-irritability to innate neural structures and activity

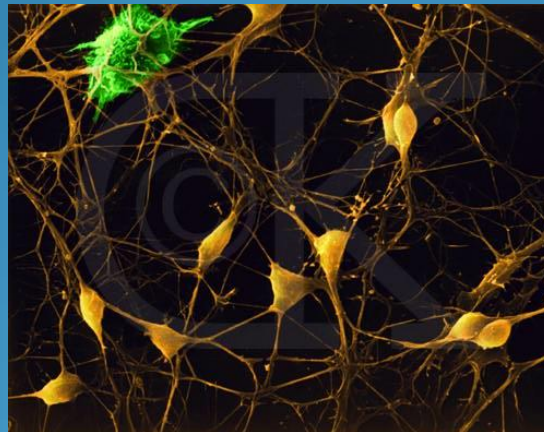
Changes occur in '*quality*' and '*quantity*' of axonal content



Rational Cont:

Remodelling of plasticity of nervous system

(to manufacturing levels)



SKIN

Mechano-receptors

Meissner corpuscles

Merkel discs

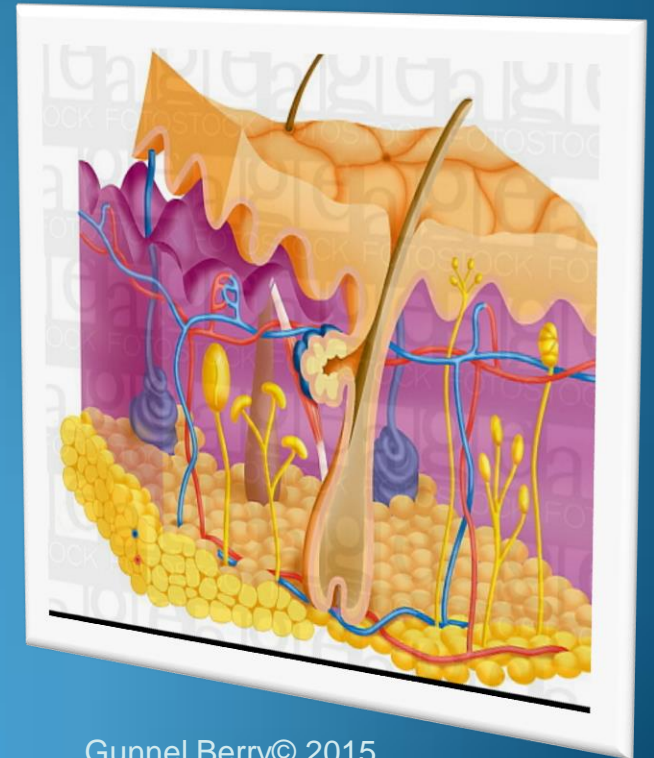
Pacinian corpuscles

Ruffini endings

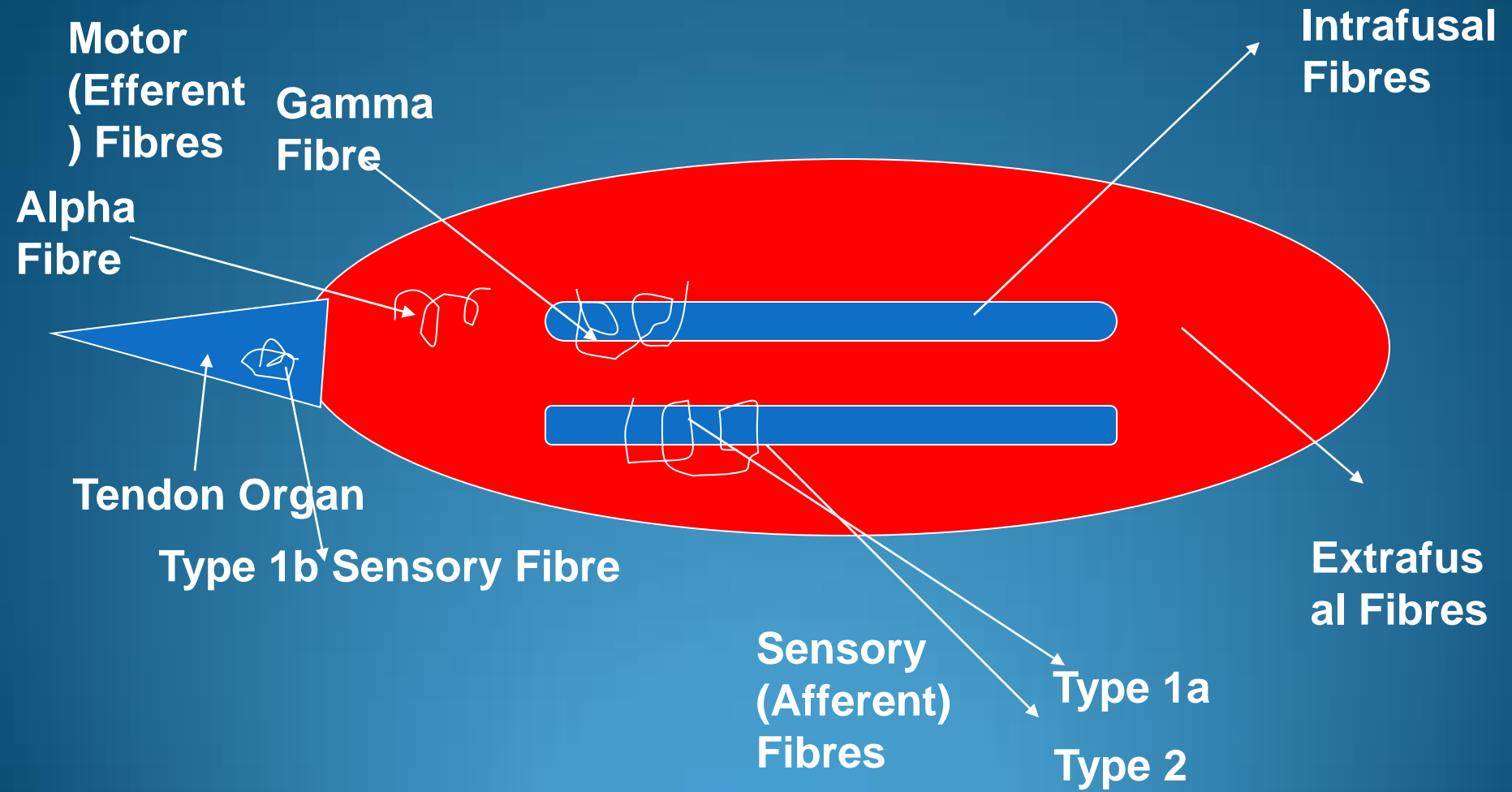
Free Nerve endings

Noci-ceptors

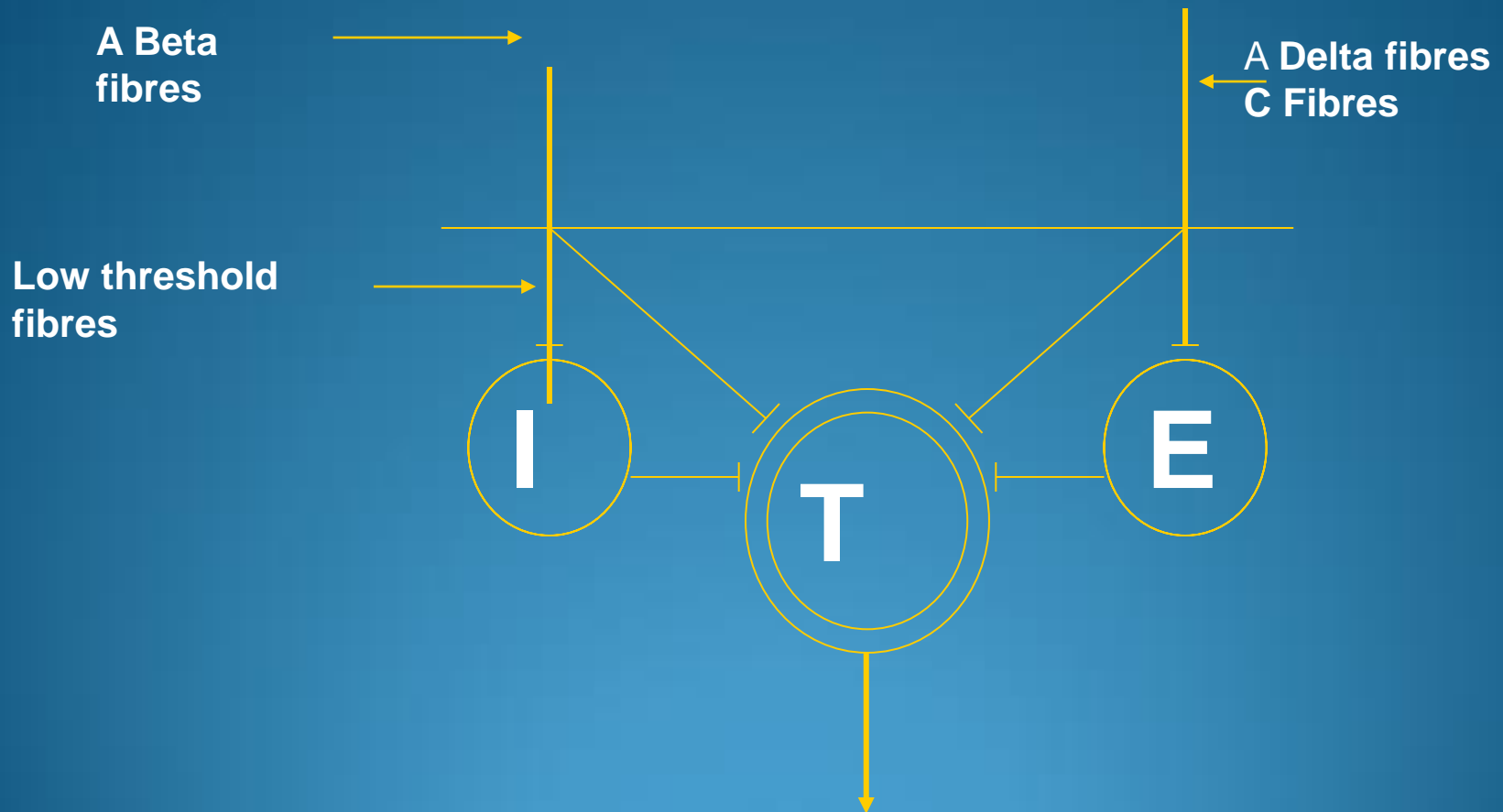
Thermo-receptors



Muscle spindle



Neural Plasticity



T = Transmitter cell

I = Inhibitory

E = Excitatory

Peptides

Excitatory

- *Prostaglandins*
- *Serotonin*
- *HP5+*
- *NGF (new growth factor)*
- *Cortisol*
- *Bradykinin*
- *subP*
- *NMDA*

Inhibitory

- *Endorphins*
- *Enkephalines*
- *Opioids*
- *Oxytocin*

Peptides

Excitatory

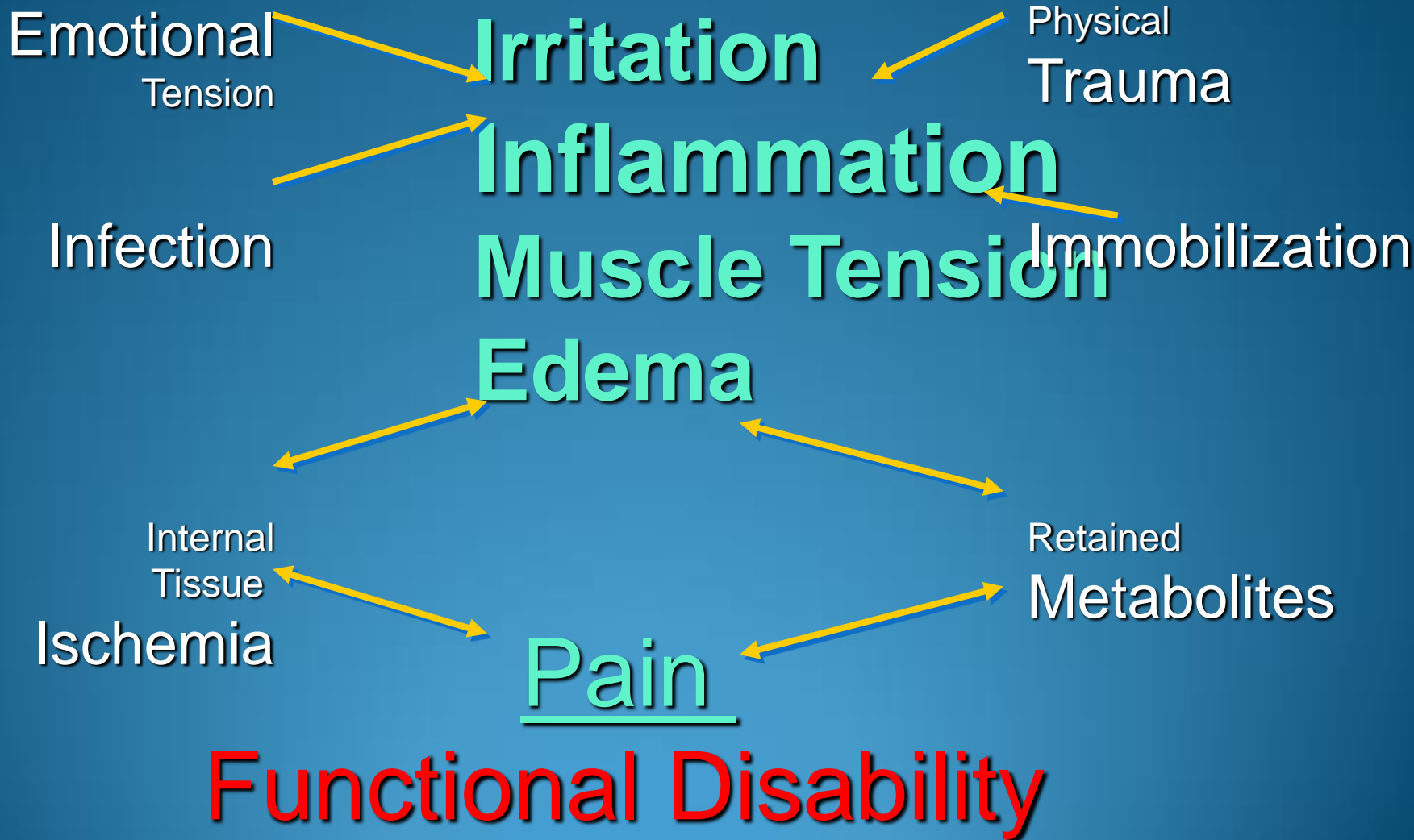
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Tissue damage



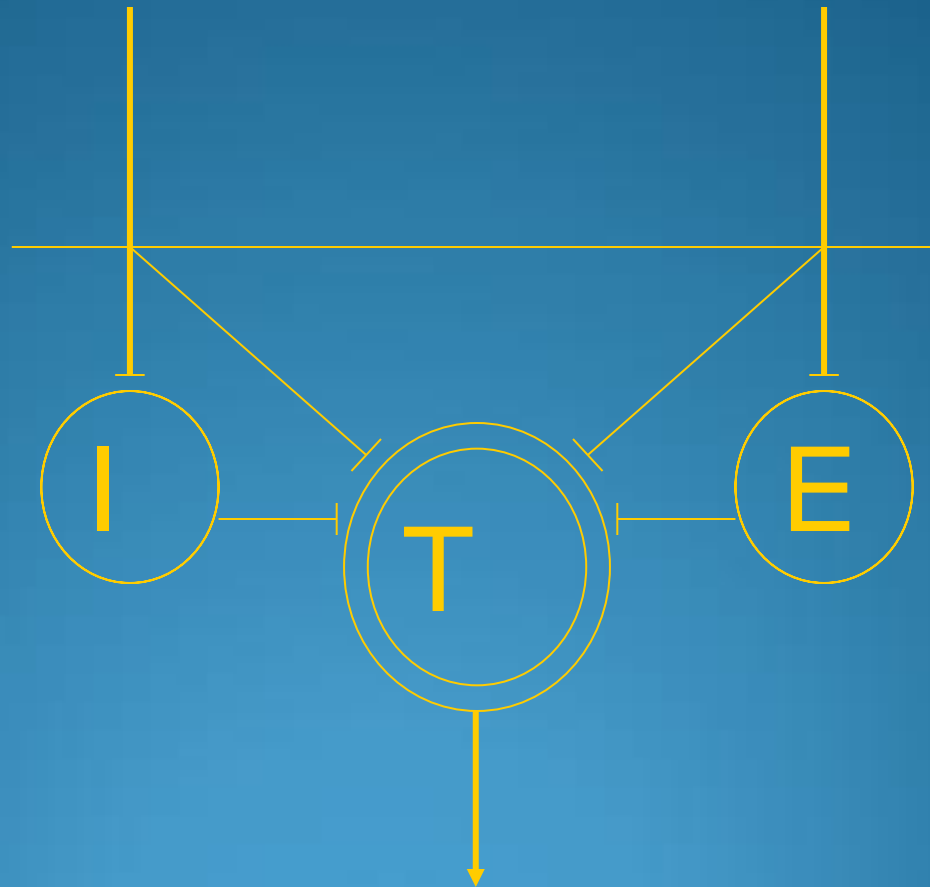
Pain Production

- Pain is normal and saves lives
- Persistent pain is a curse and destroys quality of life
- Pain is consequence of peptidal onslaught
- Effect of Neural Plasticity produces Global Pain

Persistent Pain

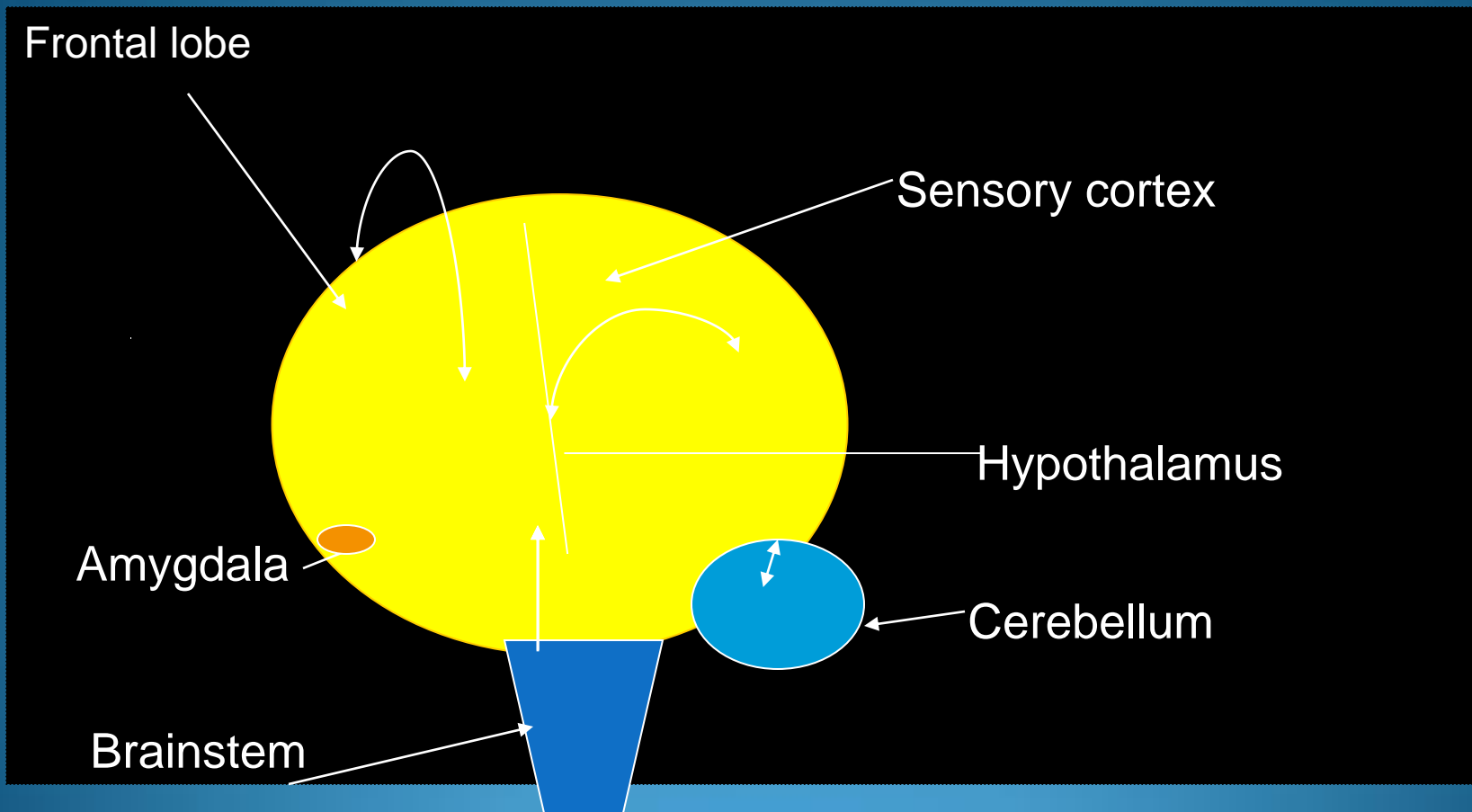
- **\$635 million lost productivity and medical treatment (2011)**
- **20% of all whiplash injuries end in chronic pain**
- **No known therapy to relieve persistent pain**
- **Medical training and pain**

Central sensitization



Central sensitization

Cortical re-organization



3.

AdRx

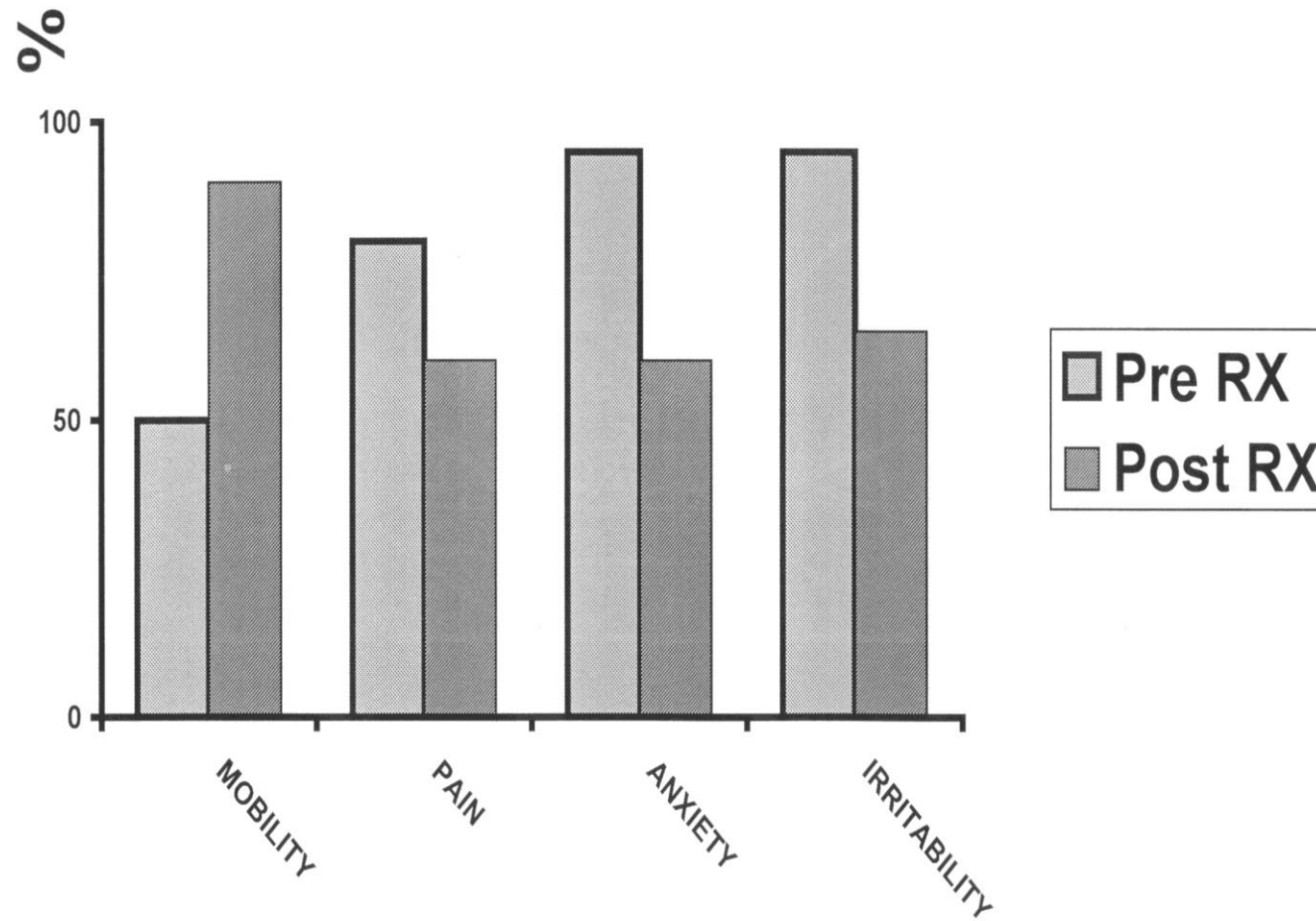
- Application



Duration & Pressure

TREATMENT	HIGH IRRITABILITY	LOW IRRITABILITY
Short duration (30 - 60 secs)	✓	
Long duration (1 - 3 mins)		✓
Slight pressure (1 - 2 mm)	✓	
Deep pressure (2 - 10 mm)		✓

Outcomes

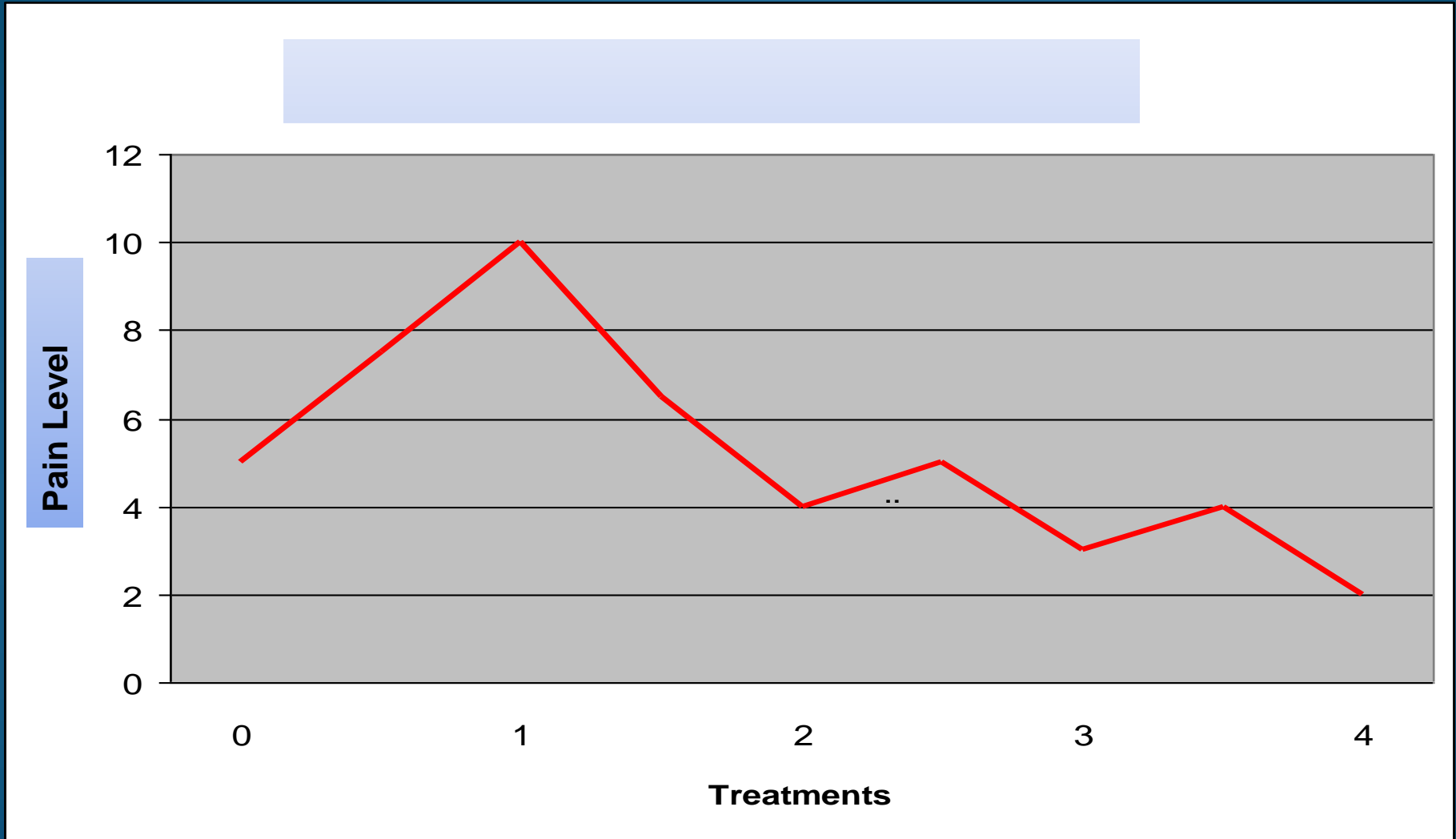


Cervical Range of Movement

CROM

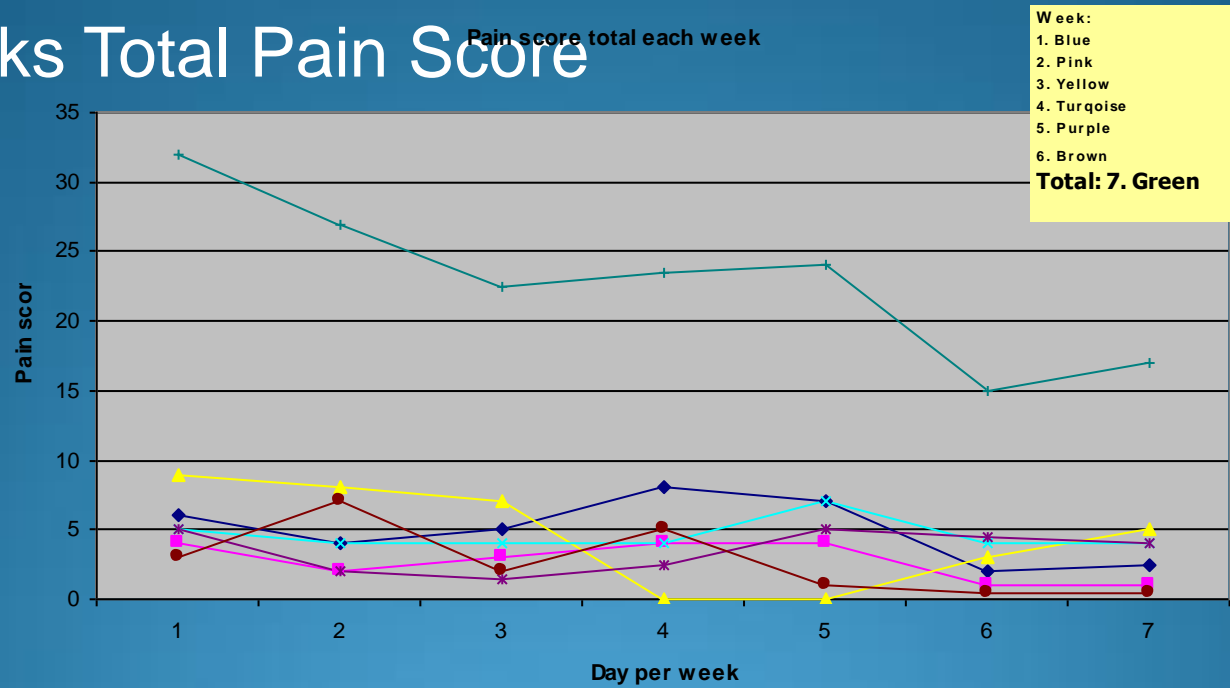


Pain pattern after 4 treatments



Pain graph

- 6 weeks Total Pain Score

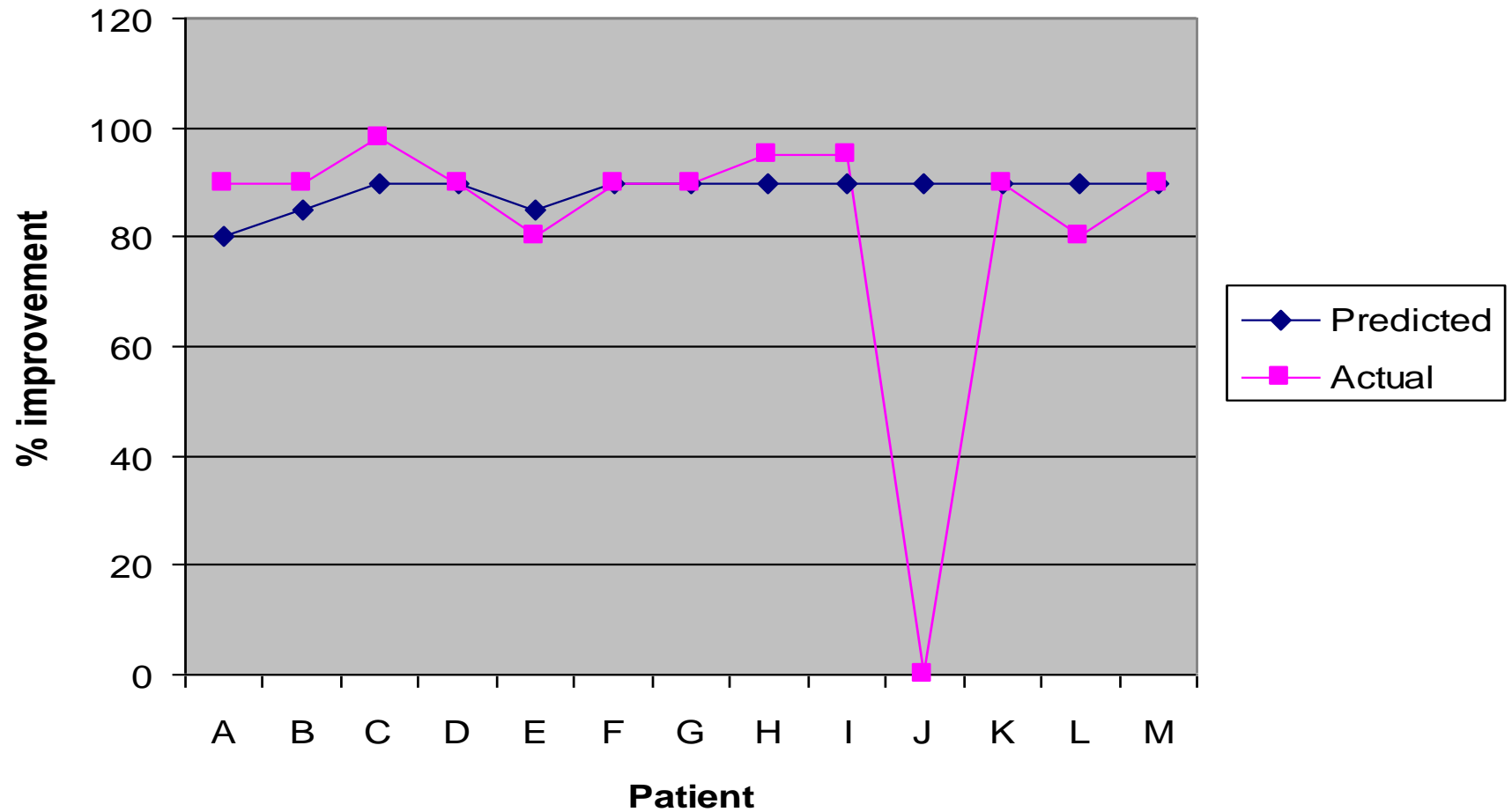


4. Evidence for AdRx

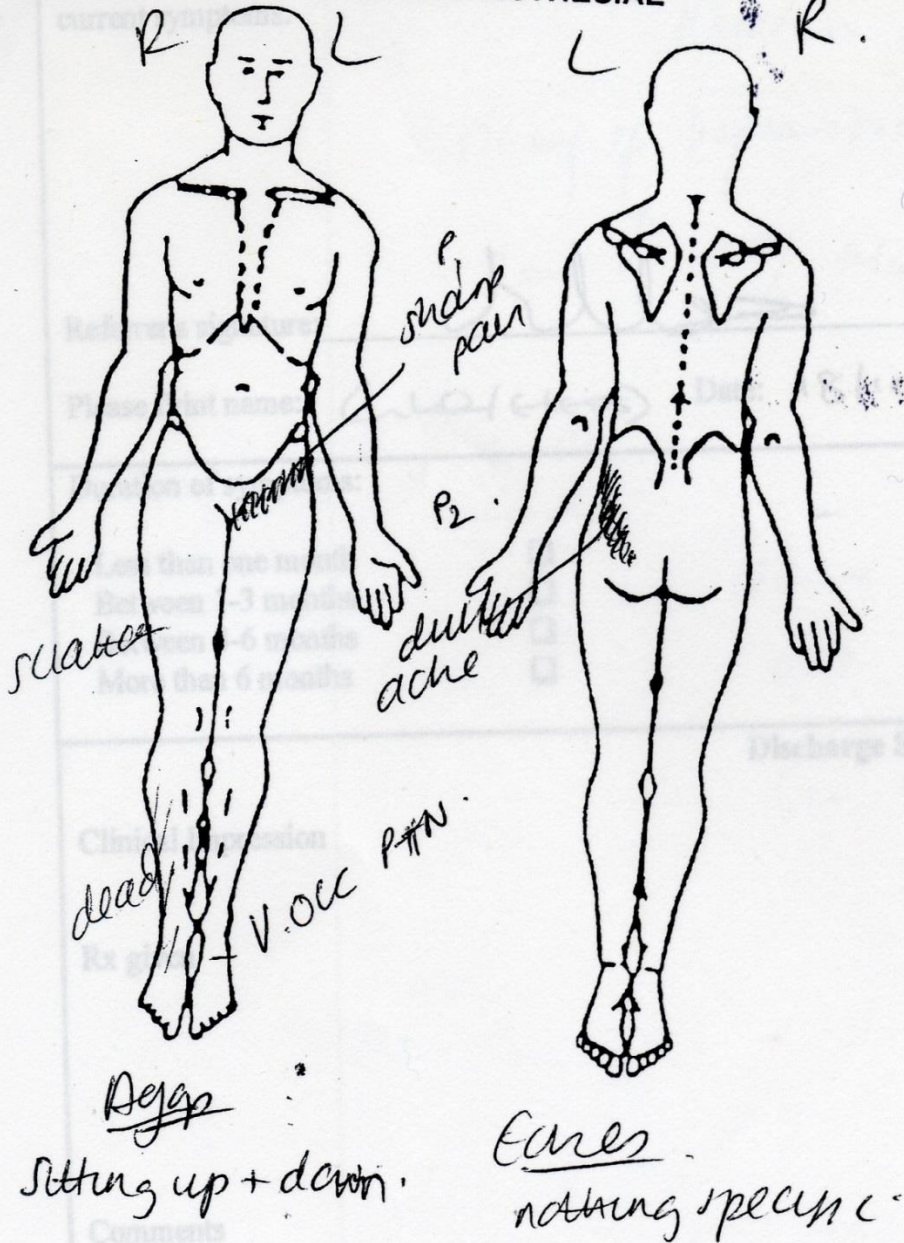


% Improvement Chronic Whiplash

OUTCOME



SITES OF PAIN AND PARAESTHESIAE



- CASE 1
- 72 yr old F

2 year (L) hip pain

Interventions:

- MUA
- HC injection
- Physiotherapy x 6

Interest:

- Golf ++
- AdRx: x1
- cause: Symphysis Pubis joint stiffne

x 66BY

mechanics;
bicycle

MOTORBIKE:
400cc.

not walking

↑ p. kneeling

Wakes up in morning e.p.
sometimes

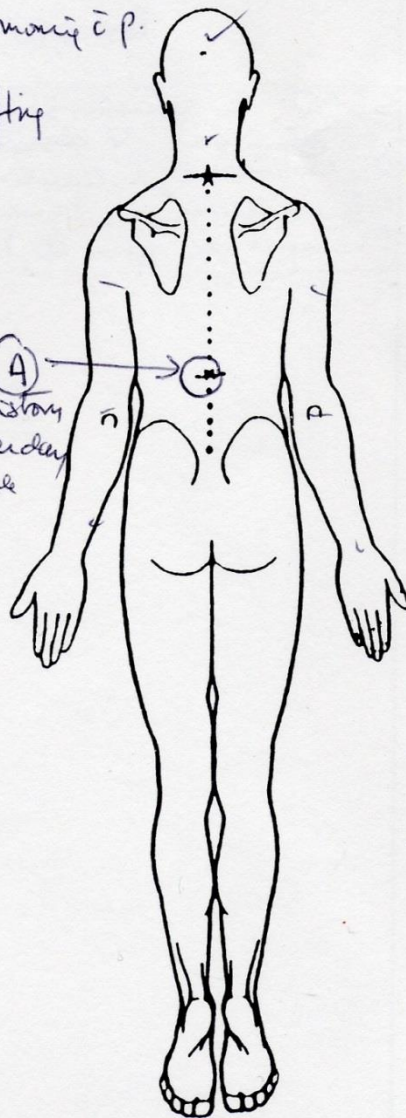
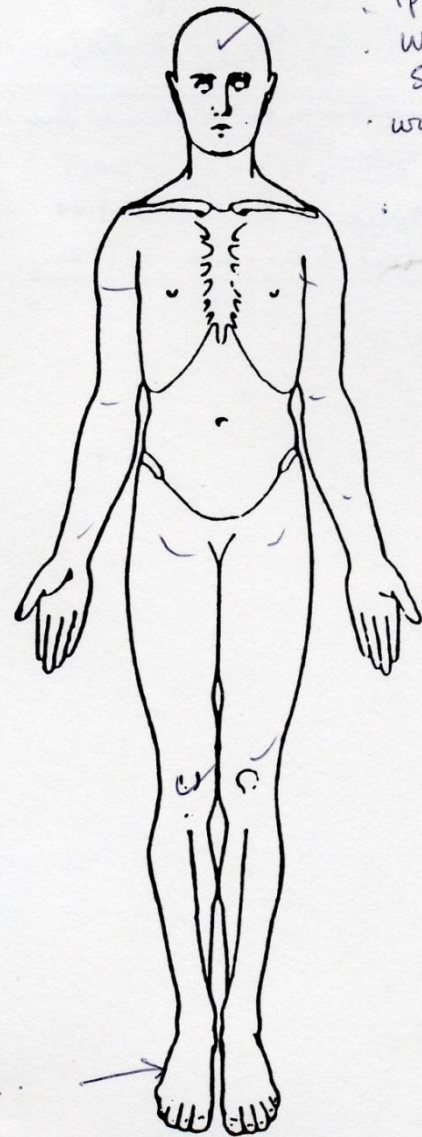
worse after lifting
concrete

Medication

o.

G.H.

good.



1 year history
every other day
lasts a couple
of days -
then
clicking

S.P.

Diabetes
Epilepsy
Smoke
weight ✓
steroids

x2

ball kicked by somebody

CASE 2

16yr old M

1 year middle back pain

Affected:

- Sleep
- Movement
- Work activity

• 'clicking'

• AdRx: x1

• Outcome: sleep immediate improved

Recommendation

- **fMRI scanning research**
- **AdRx may offer an opportunity for change in acute and chronic pain states.**
- [Workshop 19th August - 11 a.m.]
- **Thank You.**

References relating to Adapted Reflex Therapy

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