Manipulation according to Maigne

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1 – Away from the barrier

**Thrust**

- **Manipulation**
- **Mobilisation with impulse**
- **Thrust**
- **HVLA** *(High Velocity Low Amplitude)*
1 – Away from the barrier

Thrust

• *Manipulation of the spine is an old art...*

Hippocrates
(460-357 BC)

Indirect thrust manipulation applying a no pain rule
1 – Manipulation: direct or indirect?

2 - Definitions

3 – HVLA = pain ?

4 – The indirect methods

5 – Seven basic HVLA techniques

6 - Conclusions
1 – Away from the barrier

**Thrust**

- against the restrictive barrier
- in a relaxed controlled manner
- along the right plane
- with a nice successful « pop »
1 – Away from the barrier

**Thrust**

- Direct
- Indirect

No pain manner
No pain Rule
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1 – HVLA indirect : why not ?
2 - Definitions
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indirect technique
to remove motion loss
in a somatic dysfunction
away from
its restrictive barrier
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1 - Indirect manipulation
2 - Definition
3 – HVLA and pain
4 – The indirect methods
5 – Seven basic HVLA techniques
6 - Conclusions
2 - Definitions

3.1

Dysfunction in the mobile segment of Junghans

Signs in:

- dermatome
- myotome
- sclerotome
3.2 – Pain and Nociception

- Nociception is a sensory process, though pain is a sensation, a perception.

- A pain avoider or a pain confronter?
3.3 – Regulation of pain (1)

**Gate**

C fiber nociceptors can be diminished by activity in the same time produced by A delta and A beta fiber low threshold mechanoreceptors.
3 – HVLA = pain?

3.3 – Regulation of pain (2)

**PAG**

neurons send descending axons to the medulla
3 – HVLA = pain?

3.3 – Regulation of pain (3)

**DNIC**

Diffuse Noxious Inhibitory Controls
3 – HVLA = pain?

3.3 – Regulation of pain (3)

DNIC

Wide Dynamic Range Cells (WDRC)
3.3 – Regulation of pain (3)

a sensitive gradient on their cutaneous receptive field
3.3 – Regulation of pain (3)
3 – HVLA = pain?

3.3 – Regulation of pain (3)
3 – HVLA = pain?

3.4 – Classification of indirect technique

- Robert Maigne’s technique

(1968 thrust in the direction of freer permitted motion)
3.4 – Classification of indirect technique

Michael L. Kuchera

the operator:

- goes away from the restrictive barrier to a point of ease or balance. This is a localized area of ease in all planes normal to that joint and is termed the indirect “barrier”.

- The operator then uses intrinsic body forces, including respiration along with traction or compression to help the body remove the barrier.
3.4 – Classification of indirect technique

...part away from the restrictive barrier to a point where all the planes of motion are balanced and there is relaxation of all the factors that mechanically or neurologically are maintaining the barrier.
3.4 – Classification of indirect technique

Indirect positioning:
The operator places the joint in the direction in which it likes to go

the best moment to manipulate a joint
3 – HVLA = pain?

3.5 – The functional approach

*Karel Lewit*:

The locomotor system informs us of dysfunction by way of pain and tension

- tight muscle,
- dysfunctional joint,
- thickening of skin, fascia and muscle

Stereotypical patterns of muscle imbalance in predictable kinetic chain reactions
| 1  | HVLA indirect : why not ? |
| 2  | Definitions               |
| 3  | HVLA = pain ?              |
| 4  | The Maigne Technique      |
| 5  | Seven basic Maigne techniques |
| 6  | Conclusions               |
4 – The Maigne techniques

4.1 – Manipulation treatment Procedure

- X-Ray imagery
- Patient’s complaint
- General physical examination
- Neurological testing: Motor, sensitive and reflexes
- Identify the manipulable somatic dysfunction
4.1 – Manipulation treatment Procedure

- Position the patient
- Position the operator, with fluid motion and facing the action
- Finding the locking mechanism
4 – The Maigne techniques

4.2 – Maigne techniques (1)

-clinical approach to the dysfunctions
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Global examination

- Front
- Back
- Side

Static examination
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Global examination

- Active testing
- Fingertip-floor distance
- Schober index

Dynamic examination
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Global examination  Dynamic examination
Fingertips floor distance
4.2 – Maigne techniques (2)

Global examination

Schöber index
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Global examination

Star diagram
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Global examination

Star diagram.

Manipulation in the opposite directions: rule of no pain and free motion
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Segmental examination

Maigne’s “minor intervertebral disturbance” (MID) = functional disturbance of the apophyseal joint = facet syndrome
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Segmental examination

Local signs
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Segmental examination

Local signs
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Segmental examination

Signs at a distance
4 – The Maigne techniques

4.2 – Maigne techniques (2)

Segmental examination

Signs at a distance
4 – The Maigne techniques

4.2 – Maigne techniques (2)

• Zones of Cellulalgia

Skin rolling test
4.2 – Maigne techniques (2)

• Teno-myalgia

On key muscles
4 – The Maigne techniques

4.2 – Maigne techniques (2)

- C6
- Dorsal ramus: lateral part of the scapula
- Ventral ramus: lateral epicondyle
4.2 – Maigne techniques (2)

- T12

Dorsal ramus:
Upper lateral part of the buttock

Ventral ramus:
Inguinal area, greater trochanter
4 – The Maigne techniques

4.2 – Maigne techniques (2)

• S1
  Cellulalgia in the calf
  Myalgia in the biceps and gastrocnemius
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5 – Seven basic Maigne techniques

5.1 The rules of our manipulation:

- patient must be relaxed
- operator must be relaxed
- one joint is mobilized at a time
- one movement in a joint is restored at a time
- one aspect of joint is moved upon the other which is stabilized
- no forceful movement must ever be used
- the manipulative movement is a sharp thrust gapping the joint
- in a no-pain manner and freer movement
- the movement occurs when all of the slack has been taken up
- no therapeutic maneuver is done in the presence of joint or bone inflammation or disease
5 – Seven basic Maigne techniques

5.1 – Cervical rotation

Recruitment:

In flexion: one hand cradles the occiput and flexes the cervical spine, the other hand palpates the concerned level, the middle finger pad beneath the spinous process to be manipulated, the index finger beneath the lower spinous process, and controls the mobility of the joint on the side of the Minor Intervertebral Disorder (MID).
5 – Seven basic Maigne techniques

5.1 – Cervical rotation

Operator moves along the sidebending hand which is entirely flattened against the neck and mobilizes only the upper part of the neck.
This is a pure movement without rotation.

Focus

With a lateral translation against the opposite side.

Putting under tension-Thrust

In rotation, limited by a correct use of the preceding parameters.
The rotation is pure, parallel with the shoulder line.
5 – Seven basic Maigne techniques

5.2 – Sitting cervico-thoracic

- Madame Recamier
  David
5 – Seven basic Maigne techniques

5.2 – Sitting cervico-thoracic

• Madame Recamier
  Gerard
5 – Seven basic Maigne techniques

5.2 – Sitting cervico-thoracic

The rules of our manipulation
5 – Seven basic Maigne techniques

5.2 – Sitting cervico-thoracic

-patient must be relaxed
5 – Seven basic Maigne techniques

5.3 – Side laying cervico-thoracic: mandoline

-operator must be relaxed
5 – Seven basic Maigne techniques

5.3 – Side laying cervico-thoracic: mandoline

-one joint is mobilized at a time
5 – Seven basic Maigne techniques

5.4 – Dorsal supine unrolling

-one movement in a joint is restored at a time
5 – Seven basic Maigne techniques

5.5 – Dorsal sitting unrolling: « Nelson »

-one aspect of joint is moved upon the other which is stabilized
5 – Seven basic Maigne techniques

5.5 – Dorsal sitting unrolling: « Nelson »

-no forceful movement must ever be used
5.6 – Sitting thoraco-lumbar: « Baudrier »

-the manipulative movement is a sharp thrust gapping the joint
5 – Seven basic Maigne techniques

5.7 – Sitting thoracic junction

-in a no-pain manner and freer movement
5 – Seven basic Maigne techniques

5.8 – Side-lying lumbo-sacral junction

-the movement occurs when all of the slack has been taken up
5 – Seven basic Maigne techniques

5.8 – Side-lying lumbo-sacral junction

-no therapeutic maneuver is done in the presence of joint or bone inflammation or disease
CONTRAINDICATIONS

- rheumatoid arthropathy, malignancy, bone or joint infection, myelopathy, clinical manifestations of vertebrobasilar arteriole insufficiency (to cervical manipulation)
- but the greatest contraindication to manipulation is lack of training and skill
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- Skin
- Receptors
- Spinal cord
- Brain
- Body
- Suffering patient
- Primum non nocere
6 – Conclusions

• *Irwin Korr*

Musculoskeletal system =

*the primary machinery of life*
Conclusions

Janda

• To rehabilitate the motor system:
  - normalize joint function
  - relax hypertonic muscles
  - facilitate inhibited muscles
  - reprogram coordinated movement
6 – Conclusions

- The aim of manipulation:
  Normalize a « bind »

- The basis:
  the « barrier » phenomena

- The muscle release techniques
  = long term results
6 – Conclusions

• **Korr**
  
The spinal cord is:
  
  the keyboard
  
on which the brain plays

  when it calls for activity or for change in activity
• **Lewit**

- Segmental dysfunction is the **key reflex** change associated with pain

- **treating joint dysfunction is the first line** of treatment

- **Interface** between muscles and joints is the rule

- Identify the key link in a patient’s **dysfunctional chain**
• THANK YOU