

Dr Johan J De Cock, PhD, MSc, DO.

Learning palpation

Introductory exercises
&
incorrect engrams in education

Potsdam / September 2011

The Art and Science of Palpation

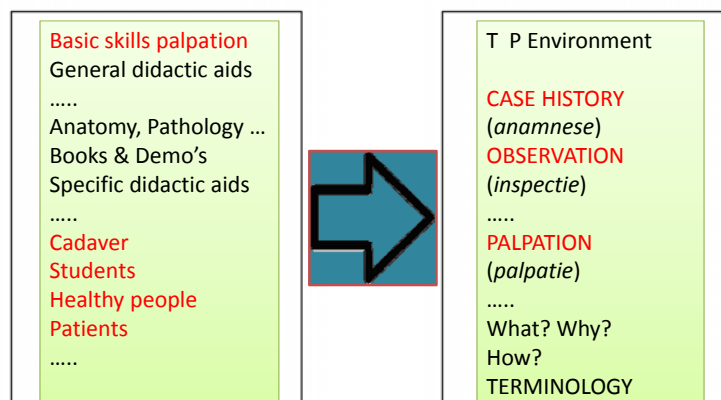
Conference 'Teaching palpation'
29-30 Sept 2011 Potsdam (Germany)
Osteopathic European Academic Network
(OsEAN)



Learning palpation

- **What means 'palpation'?**
- Lat. 'palpare' (> 'palpatio') = stroke (E.), streicheln (D.), palperen (NL) ...
- 'Palpare' > Spanish, Italian, Roemenian ...
- Palpation is the process of examining by means of touch.
- The act of feeling with the hand ... beyond the various modalities of touch (Viola Frymann 2005).
- A child learns to sit, to stay, to run ... to speak, to read, to write ... palpation must also be learned ...

Learning palpation



Learning palpation

Exploring through **touch** is an important **skill** for an osteopath. To improve this skill, we recommend:

- 1) to devote more time **teaching palpation exercises** with the use of **simple didactic tools**;
- 2) to **abolish palpation for anatomical symmetry**, since it **induces false engrams** in students;
- 3) to **review palpation of the physiological movements of the skull bones**.

We support our visions with:

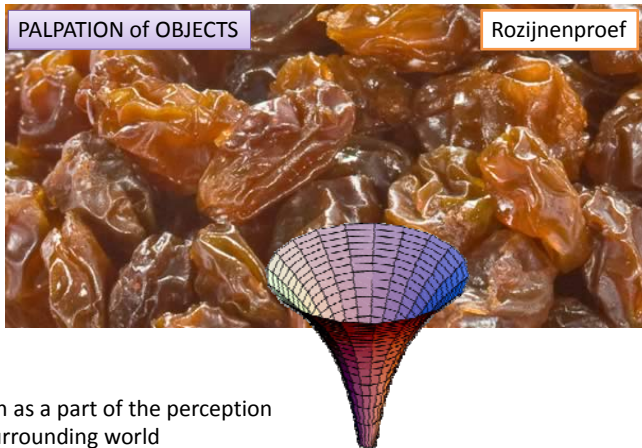
- practical examples
- logical evidence
- results of experimental research.

Learning palpation

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Learning palpation



Palpation as a part of the perception
of the surrounding world

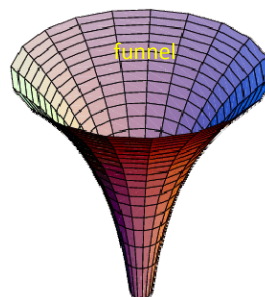
Learning palpation

PALPATION of OBJECTS

Rozijnenproef

Other eatable objects

Other objects



Palpation as a part of the perception
of the surrounding world

Info palpation + info other senses
(- vision)

Learning palpation

PALPATION of OBJECTS



Learning palpation

- Palpation of a wire under a paper
- Palpation of a human hair ...
- Palpation of a small picture, drawn on paper ...

PALPATION of small OBJECTS

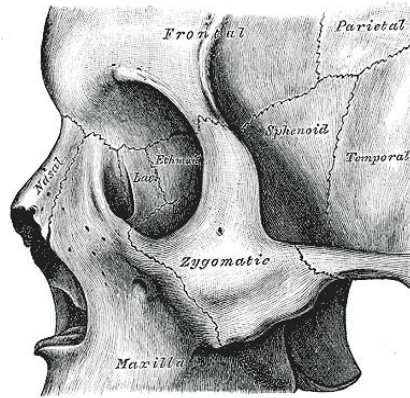
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- Palpation of a resistance
- Pulling a cloth/canvas on which a weight was placed ('towel pull exercise').
- See 'dural traction techniques'

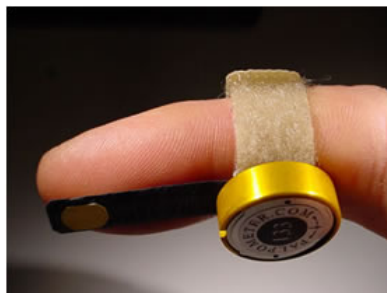
Learning palpation

- Tension and pull
- Quantitative
 - Bathroom scales
 - Digital kitchen scales
 - Pressure sensors (palpometers)

Learning palpation



Learning palpation



Learning palpation

- Tension and pull
- Quantitative
- Qualitative
 - Balloon pressure test
 - Speed and force of pressure: 'oobleck'

Learning palpation

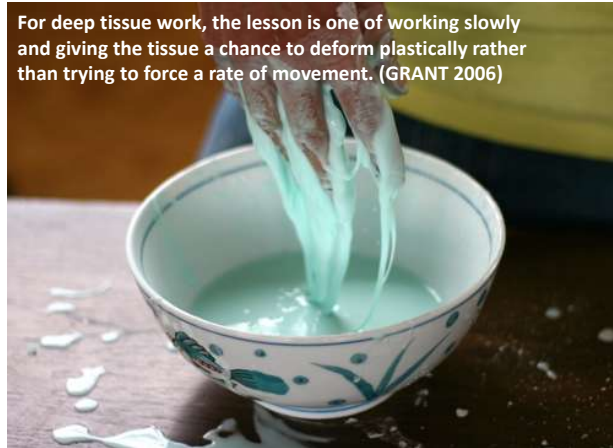


'Balloon pressure test' (druk, trek, torsie)

Learning palpation

OUBLECK

For deep tissue work, the lesson is one of working slowly and giving the tissue a chance to deform plastically rather than trying to force a rate of movement. (GRANT 2006)



Learning palpation

- Learning to appreciate **flexibility**
 - Death material > sticks of dried wood
 - Living material > a tree
 - OUR BODY > skull ...
 -



Learning palpation

- Palpation on each other & on healthy subjects
 - Basics
 - Skin: pressure, t° , vibration, humidity
 - Our hands, materials ...
 - Locomotor system
 -
- Palpation on patients

Wartenberg wheel for testing skin sensitivity and pain perception



Learning palpation

Palpation
 > anatomical localisation;
 > aid in diagnosis;
 > aid in therapy



END PART 1

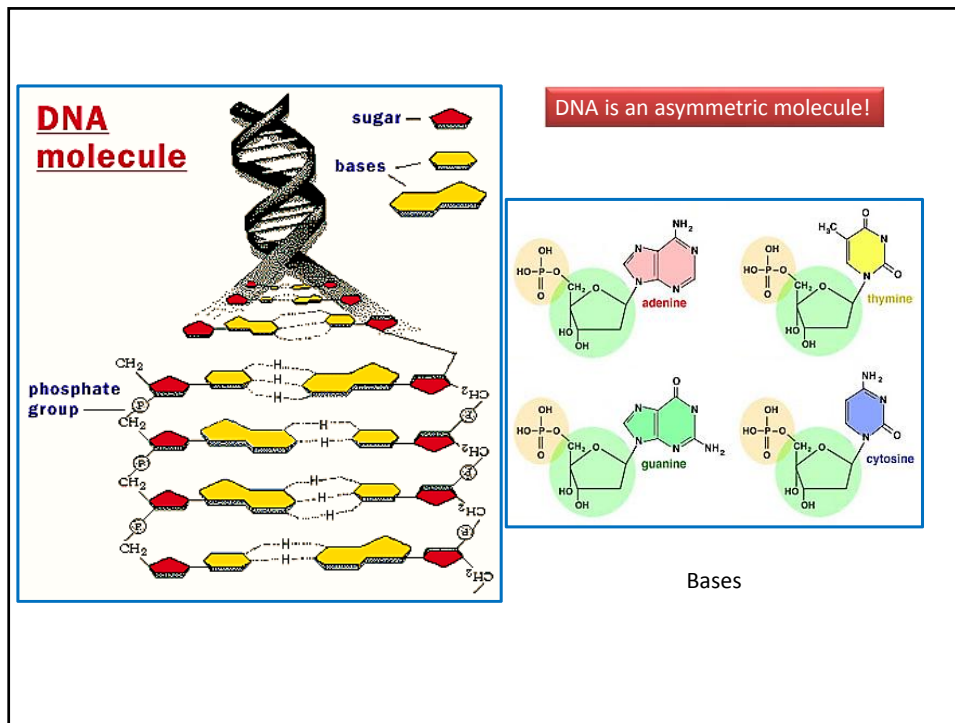
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Learning palpation

- **We gaan NIET op zoek naar anatomische symmetrie.**
- **Individuele (voorkeurs-)houdingen (posture) en (voorkeurs-)bewegingen (gait and simple movements) zijn eveneens asymmetrisch.**
- **Symmetrie is een uitzondering en géén regel!**



DNA the molecule of life

Trillions of cells

Each cell:

- 46 human chromosomes
- 2 meters of DNA
- 3 billion DNA subunits (the bases: A, T, C, G)
- Approximately 30,000 genes code for proteins that perform most life functions

cell

chromosomes

gene

DNA

protein

Learning palpation

- Asymmetry > SKULL
- Sarac- Hadzihalilović A, Dilberović F. Study on skull asymmetry. [Bosn J Basic Med Sci.](#) 4 (3), 2004 Jul; 40-46.
- McManus I.C. The distribution of skull asymmetry in man. [Annals of Human Biology.](#) 9 (2), 1982; 167-170.
- Trenouth MJ. Asymmetry of the human skull during fetal growth. [Anat Rec.](#) 211 (2), 1985 Feb; 205-212.
- ...
- Simple clinical observations, measurements ...
- Take a standardized picture of someone's head >/2 ...

Learning palpation

- Asymmetry > BODY > posture/motion

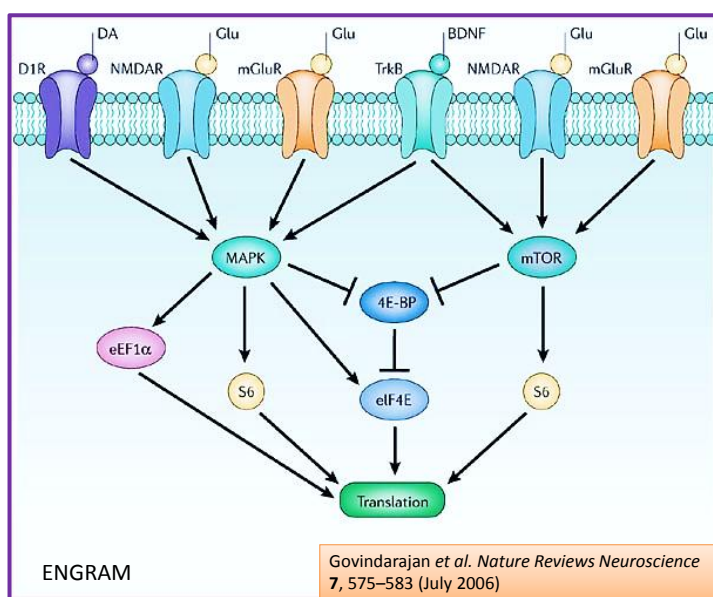
- Examples



- Armen kruisen, bidgreep, bal weggoien ...
- Bal wegschoppen, baantje glijden, spitten ...
- Moments of inertia (STEINER)

Learning palpation

- **ENGRAM: Psychology – Motion sciences ...**
- **A stored impression or stimulus impression (Richard SEMON)**
- De Cock (1996 p. 61-62, adapted): “Actieve en passieve oefeningen veranderen sensomotorische en motosensorische reacties, wijzigen het bewegingsbeeld (engram) in onze hersenen wat via een cybernetisch feedbacksysteem geëcforiseerd wordt (tot uiting komt) in meer economische, adequate, functionele bewegingsuitvoeringen”.
- Degenhardt (2009, p. 76): ‘preprogrammed patterns of action -or engrams-’



END Part 2

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Learning palpation

Review palpation of the physiological movements of the skull bones.



FACTS and ...

FICTION

Learning palpation

- DISCUSSION

- <http://pipl.com/directory/name/Frymann/Viola>
- <http://www.massagetoday.com/mpacms/mt/article.php?id=13415>
- “The approach to the study of palpation always has been too vague, too indefinite ...” (Fryette, 1954).

Learning palpation



