

Pediatric osteopathy I  
Milano September 2011  
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Looking for the information behind the form, find the stillness, and let the health manifest itself

Osteopathic treatment of newborn  
a study from the French Academy of Osteopathy

Critical analysis of the risk factor attributed to osteopathic care of the 0-9 months infants  
No accident in literature  
No accident for insurance companies offering professional insurance to osteopaths  
220.000 babies treated in France in 2005  
300.000 babies treated in France in 2006  
Decrees of the law on Osteopathy from March 2002: treatment of babies under 6 months need a medical certificate of non contraindication  
Comparativ study  
A coherent complex system  
Researches

The large book of medicine is slightly open  
Allopathic medicine is mainly chemical, looking for illnesses  
Osteopathy belongs to the vitalist and mechanical chapter of medicine - A. Abhevera  
For vitalists: Vis natura Medicatrix is the healing process.  
God's Pharmacy is within us  
Pediatry is a mainstream field to apply these principles

John Martin Littlejohn DO

Body as a vital machine  
Vitality means activity  
What's life for a physiologist?  
Free circulation of blood and nerves  
Emotions: reflect of vitality

Asking for places of retention

The hand is a sonar looking for places different from the basic noise  
Energy cysts (Upledger) and memories  
Tissue desorganisation and memories  
Entropy is enhanced; dysfunctional place for the homeostasy  
Contribute to a facilitated zone (I Korr)

Osteopathy in four dimensions

3 dimensions of space and time: 4 dimensions Nicholas Handoll DO  
Looking for Neutral/ Coherence  
Dynamic stillness Sutherland  
Beginning of self treatment R. Becker  
Balancing a vibrational system R. Fulford  
Sounds as vibrations

Felt sense

Behind the five senses and words  
Link between physical, emotional, mental and intuition  
Eugene Gendlin Chicago 1953: a systemic experience in a holistic environment  
Presence or focusing  
The map is not the territory  
Put words on sensations

Three brains Mc Lean

Cortex  
Limbic system  
Reptilian brain

Coordination of the senses

Spinal cord  
Brainstem  
Cortex  
Posterior parietal cortex areas for integration  
Peripheral sensory systems: internal effect of external input  
Compensation from one element to another

Motoric development

Musculoskeletal  
Fascial  
Membranous  
Fluid

Adaptation and plasticity

Influence of genetic and epigenetic factors  
Imbalance with the environment: stress  
Separation with mother: stress  
Change in their inner world

Vibrations E. Swedenborg

## Applications

Anything of a firm and hard nature, such as wood, stone, metal, is subjected to great tremulations even by a slight touch

An expanded membrane is the best medium of tremulation

The tremulation of a string will cause a sympathetic vibration in another string; a membrane similarly affects another membrane; that is, if both are tuned in the same key

Our vital force consists in little vibrations

Tremulations in the air make rings and circles, and are heard on all sides round the center of the motion; that is, if the whole mass is not being moved

In tremulations, there are millions of variations

Vital force in a newborn

Nothing is stable on a newborn in the whole body

Everything can change and move regarding the informations received

Life and felt senses can accomodate what seemes hard and non moving (bone)

The respiratory and digestive system are not really effective before birth; the nervous system is not mature after birth

Vibrations in the newborn

Motion takes place in the fluids in a contiguous system

Vibrations are reflected thru the connective system to the whole body

New informations will change the matter if the informations move thru the fluids

Vibrations and main senses

Vestibular, auditory system and ears

Visual system and eyes

Somato sensory system and musculoskeletal elements

Vibrations transformed in electrical and chemical signal for the brain

Stress as memory

Inbalance in the environment

Separation with the mother

Hyperstimulation

Non answering to needs

Perceptual studies on babies

Senses: function exists before structure

Week 7: smell, taste

Week 9: touch

Week 10: vestibular system

Week 12: auditory system

Then, migration of neurons to the cortex

Week 22/ memory and answers to auditory stimulations

Source: Pr J P Relier

Fœtus and senses

Interactions

Smell

Heat

Heart beat

Touch

Voice Intonation

Taste of milk

Respiratory rythm

A systemic approach of complexity

Conditions of motoric and sensorial developpement

Central axis

Grounding and opening

Respiration

Digestion

Lateral chains and hands

Proprioception

General listening and treatment

Three dimensional space

Time: present moment: fourth dimension

Senses: see, smell, ear, taste, touch

Felt sense, intuition: sixth sense

Put words on your sensations

Cranio-medullo-sacral axis

The growth of the notocord is not positional B.Freeman

Midline in central position for birth

During work: importance of this axis

Unifying factor in the process of birth

Modern Birth conditions

Parental stress and hyperactive mothers

Lack of the presence of the women lineage

Preterm babies from 26 weeks of pregnancy

Generalisation of epidurals

Mothers lying during work

Pressure on the belly during work

Forceps

C sections...

Negative birth conditions

Medications

Prematurity

Lack of familial environment

Medical interventions:forceps...

Too long or too fast process

Birth complications

Lack of bonding

Events compromising needs from babies

Unresolved prenatal or birth trauma

Emotional difficulties from parents

Bad environment (violence, noise, smoke, feeding, bonding)

Birth process under our hands

Fight: passive then active

Work, presentation, orientation, expulsion

4 phases of birth (S.Grof; B.Montaut)

Manual tissue listening

Position of ease

Be still and know (Sutherland)

Vital forces help the Health present

Birth process

Birth stages

Scoliotic mother

Birth as a fight?

Difficult birth

Axis?

Asymetry

Intraosseous occiput

Back to sleep campaign

Babies on the back

Motricity of the digestive system

Lymphatic drainage

Motility of the diaphragm

Consequences on psychomotor developpement

Position of the head

Plagiocéphalies (PPOP)

Asymetry

Positional asymetric in utero

Genetic

Epigénétic

Développement in a liquid environment

Constaints (oligoamnios, déformation utérine, syndrom of the ground floor, gémélarité...)

Physical and emotional events from the mother

Skills acquired

Neurons mirrors;cerebral plasticity

Insula as integration center

Consequences of asymmetrical positions

Différentiel diagnosis: craniosynostoses

Asymetries during birth process

Fronto occipital with torticolis, occipital, brachycephali

Back to sleep campaign 1992: exagerations

Placebo effect ofosteopathy

Return to normal?

Early Osteopathy

Practice

Midlines

General approach of the basi cranium

Obstetrical door:Intraosseus occiput

Level of treatment

Memories and vibrational model

Put words on sensations

Cranial Bowl

Tools:new senses

New perceptions

New perceptual universe

Neutral as significant detector

Time and neutral

Neutral and space

Levels of perception

Intentional Touch

Levels of perceptions

Physical

Emotional

Metabolic

Physical perceptions

Attention

Intention

Presence

density

## Emotional perceptions

Tensions  
Vibratory fulcrum  
Levels of vibration  
Looking for neutral  
Communication  
Links with mother

## Metabolic perceptions

Speed of tissue answers  
Liver and viscera  
Different sensations  
Vaccinations and drugs

## Vibrations and main senses

Vestibular, auditory system and ears  
Visual system and eyes  
Somato sensory system and musculoskeletal elements  
Vibrations transformed in electrical and chemical signal for the brain

## Fulcrums

In a living system, everything is moving; wheel example  
A point of balance to maintain homeostasis Donna L Taylor  
Apparently non moving place  
Axis of force  
Automatic shifting point  
Presence of the therapist can be a fulcrum (Tricot)

## Vibratory fulcrum

Perception, non mechanical, which led to a point of balance, force opening new doors  
The inhering potency in the system develop from that vibratory fulcrum; eye of the storm (R.becker)  
Optimal receptivity point  
Point of transformation

## Ante natal memories

Intention of the parents  
Ignition system  
Genetic and epigenetic influences  
Water environment during pregnancy  
Midline  
Light from inside: respiration through skin  
No need for food/perpetual nutrition  
Senses and emotions  
Ventricles and CSF  
Practice on diaphragms  
Respiratory diaphragm  
Upper respiratory diaphragm  
Pelvic diaphragm  
Cranial diaphragm

## Fascias Connective tissue physiology Simon Sellam

Isolation  
Protection  
Remplissage  
Transport  
Attache  
Réception  
Enveloppe  
Follow vibratory model

## Fascias Vehicle for emotions

Largest organ  
From mesoblast  
Elasticity  
Bone as a dense connective tissue  
Continuity even in the cranium and viscera  
see Gabarel; Paoletti

## Cranial chains Three main vertical chains

To prepare the baby to verticalisation  
Psychomotor development of the child  
Opposed to gravity  
Relation with electromagnetic forces  
Leading to neutral  
Three main central chains

## Anterior chain

Present during pregnancy

Pineal gland, straight sinus, squamous occiput, tympan, hamer, mandibula, tongue, pharynx, pectoralis major, anterior deltoïde , flexor fingers  
Physiology: suction, mouth-hand, affectivity  
pectoralis major, pyramidal abdomen, adductors, droit interne, jumeaux, add first  
Physiology: schéma of flexion

#### Facial chain

Start at birth  
Linked with opening to the outside world  
junction brain faux /cerebellum tent, sphénoïd, ethmoïd, nasion, face muscles in relation with sub occipital muscles, longissimus dorsi,  
to sup members : super spinatus, deltoïd post, triceps, finger opening muscles  
To inf members : iliocostal, sacrolombir, lombar ponevrosis, sacrosciatic ligt, gluteus, harmstrings, soleos, flexor, plantar muscles  
Physio: balance the anterior chain, non verbal postural communication , opening to the outside world

#### Central chain

Axis of life  
Sphénoïd, pituitary, sinus cavernosis , ptérygoid muscles, ligt nuchaie, rectus abdominus, psoas  
To sup mbers : pectoralis minor, epicondylis muscles, extensor digitalis,  
To inf mbers: iliacus muscle, vastus media, extensor digiti  
Physiology: breathing and posture; péritoneum; digestion

#### Systemic approach Attachement theory

Henry Harlow 1972: Learning and love: if the baby monkey goes first to the nurse provided with milk, it remains mostly attached to the nurse covered with a pile of fabric.  
We were not surprised, says Harlow, to discover that contact plays an important role in the emotional ties that bind mother and child, but we did not think he would win so totally on the food factor .

#### Imprinting

Lorenz demonstrated how incubator-hatched geese would imprint on the first suitable moving stimulus they saw within what he called a "critical period" between 13–16 hours shortly after hatching.  
In child development, the term is used to refer to the process by which a baby learns who its mother and father are. The process is recognised as beginning in the womb, when the unborn baby starts to recognise its parents' voices.[1]

#### Babies reactions

Cries as a signal  
Smile as an interaction  
Sucking as a relation  
3 phases (J Bowlby)  
The inner representation of this parent-child bond becomes an important part of personality  
our earliest relationships become an important part of our lives, and that the internal working models guide us throughout future relationships.

children's behaviors can be best understood in terms of their adaptive value, they seek a full understanding of the entire organism-environment system, including physical, social, and cultural aspects (Hinde,1989)

This 'transmission' of attachment patterns supports the idea of internal working models that extend into adulthood as guides for future relationships, secure base and internal working models exist and play an important role in the development of relationships in infancy, childhood, and adulthood  
[www.personalityresearch.org/papers/pendry.html](http://www.personalityresearch.org/papers/pendry.html)

#### 3 phases of reaction

Protest: Refusal contact, aggressive  
Despair: seclusion  
Detachment: rejection of the mother

#### Bonding

Exchanges between inside and outside  
Base for satisfactory experiences  
Communication  
Self estim  
Parents environment  
Consequences on limbic system and brain stem  
Psychosocial issues  
Anxiety, depression, psychosis

#### Pain

Ameliniques nociceptor fibers  
A delta myelinic fibers rapid response  
C amyelinic fibers sensory Information slower response  
Horn dorsal marrow  
Spino thalamic way: thalamus somatosensory homeostasis  
Somato sensory Cortex  
brain stem; substance grey emotional  
C fibre: images of the body and emotions  
Autonomic nervous sytem  
Thalamus  
Insulae : stress;sensual touch;music; sensorial awakening  
Somato sensorial cortex

#### Insecurity syndrom during pregnancy

Unsaid psychological and cultural conflict leads to dysmenorea and sterility  
During pregnancy: depression and psychic troubles; autonomic troubles  
During delivery: consequences on mothers and babies:insecurity  
Source: Pour en finir avec la peur d'accoucher Josette Fort in les dossiers de l'obstétrique Octobre 2006

Phases 1 and 2  
from Paradise to Hell  
Phases 3 and 4  
From activation to freedom

## Modern Birth conditions

### Collective dimension

Parental stress and hyperactive mothers  
Lack of the presence of the women lineage  
Preterm babies from 26 weeks of pregnancy  
Generalisation of epidurals  
Mothers lying during work  
Pressure on the belly during work  
Forceps  
C sections increase China M.Odent  
[www.primalthresearch.com](http://www.primalthresearch.com)

### Negative birth conditions

Medications  
Prematurity  
Lack of familial environment  
Medical interventions: forceps...  
Too long or too fast process  
Birth complications  
Lack of bonding

### Events compromising needs from babies

Unresolved prenatal or birth trauma  
Insecure mother  
Emotional difficulties from parents  
Bad environment (violence, noise, smoke, feeding, bonding)  
Epigenetic consequences on next generations  
Oxytocin adventure

### Birth process under our hands

Fight: passive then active  
Work, presentation, orientation, expulsion  
4 phases of birth (S.Grof; B.Montaut)  
Manual tissue listening  
Position of ease  
Be still and know (Sutherland)  
Vital forces help the Health present

### Other difficult births

C sections as urgency  
Cordons  
Instrumentation (forceps, ventouses, cuillers)  
Uterine expression  
Fetals sufferings

### Adaptation and plasticity

Influence of genetic and epigenetic factors  
Imbalance with the environment: stress  
Separation with mother: stress  
Change in their inner world  
Child brain: 2 layers: awakening and new informations  
Adult brain: 4 layers: trauma, memory of the past, routine, automatic pilot  
Mirror neurons and resonances

### When treatment is needed

Prenatal disorders  
Birth difficulties  
Respiratory or digestive troubles (colic, regurgitation, asthma, bronchitis)  
Nervous or dermatologic problems  
Crying or behavioral difficulties  
Lack of weight  
Attention disorders  
Preventive approach

### Non verbal relationship

Babies as therapists  
Preverbal transference and counter transference  
Right to right hemisphere connection  
Empathy and not sympathy  
Bouncing and not mixing  
Let the child in us be present

### Verbal relationship with parents

Be aware of their feelings  
Preverbal signs  
Asking questions in a way the parents can be open to share with the osteopath  
Don't ask too many questions  
Feel the right way to be in touch with the baby  
The first touch is the only one  
Know when and how to finish a treatment

### Questions

#### General approach of a toddler

In the waiting room  
Don't be late

Be precise and short questioning with the parents  
Feel where and which position to treat the child  
Be precise and speak to the child with its own words

#### General osteopathic treatment

Symetry  
Axis  
Begin by the feet and come up to the head  
Global biomechanical examination  
Horizontal and vertical axis  
Systemic appreciation  
Vibratory fulcrum

#### Patient examination

Mobility  
Vibratory fulcrum  
Symétry along midline  
Reactions of the tissues  
Respiration; Diaphragms  
Emotions  
Birth process

#### Somatic sensory system

Not only the touch  
Informations from the skin, muscles and connective tissues  
Cortex: parietal portion  
Proprioceptivity in relation with eyes and ears

#### Influence of sensory systems on cognitive development

Key of motor development  
Coding locations and landmarks as different from self  
Active patterns regarding environment  
Stimulating signals are electric impulses to the CNS

#### Balancing and opening Conditions of motoric and sensorial developpement

Central axis  
Grounding and opening  
Respiration  
Digestion  
Lateral chains and hands  
Proprioception

#### Treatment process

Non doing but being  
Looking for health present  
Vibratory fulcrum  
Midline and diaphragms  
Neutral including the nature  
Still Point  
Ignition process

#### Treatment is: Health directing trafic

#### Sources

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