Teaching Osteopathic Diagnostics

Osteopathic Decision-Making Process and Adaptive Salutogenic Treatment

- World café -
16.15 – 18.00 Workshop 4

Christian Lunghi
WORLD CAFE
How it takes place?

- Create 4 groups of 11 people seated around a table
- Nominate the groups referents
- Description of CASE and MINDLINE (disorienting problem and difficult individual solution)
- Discussion of the group about different aspects or questions of the topic previously presented
- Graphic expression of concepts and ideas emerging in the group
- Cross-Pollination
  - The referents welcome the participants and summarize the ideas and themes that emerged in the previous dialogue.
  - During the summary the participants connect the ideas of the previous dialogues
- Sequence of successive turns
- Plenary discussion, identification of recurring patterns
- Creating a new framework – a collective MINDLINE

Café Etiquette
World Café Guidelines

Play! Experiment! Improvise!

Illustration by Avril Oloff
CH: Mr. A, 40 year old. Collided forcefully with a basket player 3 weeks ago; felt pain immediately, worse the next day; referred to GP (suspected LBP) was requested for a MRI (no impairments relieved) and blood analyses (moderate alterations: cholesterol, HDL-C, LDL-C, CRP, albumin, glycosylated haemoglobin, blood glucose); GP prescribed a physical therapist treatment and Paracetamol for 2 weeks; then he was suggested to refer to an osteopath.

Site: Pain not well localized in lumbar spine, no radiation;
In: 8/10;
Im: Trouble getting dressed, putting on socks; Sleep is disrupted due to pain; Can't do fitness training and has missed basket practice this month due to pain; Very worry about pain severity; Feeling very depressed for the last 6 months due to relationship break up.
AF: All movements hurts; pain increasing after sessions with physiotherapist;
RF: Physiotherapy and Paracetamol really didn't help.

OPE (CF-sD): Positive Bilateral Straight Leg Raise Test related to the presence of central sensitization. Positive Waddell signs and clinical tests for CS and CAPC; Altered BMI; Abdominal allodynia; constipation; Founded positive items for AOBPL; poor SOC (SOC-13 questionnaire).
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Osteopathic assessment: (CF-cD/cD)

- [M99.9 other regions] FCS not compensated, related to general adaptation syndrome
- [M99.9 other regions] FCP (positive axial fascia) related to biomechanical-metabolic-psychosocial overload
- SDs: [M99.2 - D9], [M99.3 - L2], [M99.9 - Abdominal region]

Evaluation of the clinical relevance hypothesis

- n. 1 to 3 sessions. Provocative tests on SDs [D9, L2, abdominal region] evocate an increasing pain during Straight Leg Raise and CS tests; more severe items of CAPC; more trouble putting on socks.
- n. 4 to 5 sessions. Provocative tests on SDs (Abdominal region, L2) evocate no pain during Straight Leg Raise Test and CS tests; good items on CAPC; no Waddell signs; less trouble putting on socks.

OSTEOPATHIC CARE- TREATMENT PLAN (CF-cD/cD)

- 1 session. Maximalist-systemic approaches such as General Osteopathic Treatment (interoceptive approach and lymphatic pump techniques) for 3 times in a week, and advice to remain active with exercises focused on improving biomechanical-metabolic-psychological functions;
- n. 4 session (after 2 week - reduced pain and more specific in the lumbar spine, easy in getting dressed, disappeared catastrophizing behavior, no abdominal allodynia, specific tenderness reported in the left iliac region). Minimalist-specific approaches focused on SDs such as articulatory (L 2) and visceral osteopathic techniques (Abdominal region); symptom based approaches as described in guidelines; re-referral to GP (prescriptions: physiotherapy group exercise program; nutritional advices; blood analyses).
- N. 5 session (after 3 week – no pain in the lumbar spine, no more trouble in getting dressed, no abdominal tenderness, no constipation, better waist-to-hip ratio. Better SOC). Symptom based approaches as described in guidelines, such as specific diaphragm techniques (CF-cD): . The patient refers his willpower to start again playing basket.
OSTEOPATHIC DECISION-MAKING PROCESS

CASE HISTORY
1. OBJECTIVE EXAMINATION
   - CONSTITUTIONAL AND POSTURAL OBSERVATION
   - PHYSICAL EXAMINATION TESTS
2. DIFFERENTIAL DIAGNOSIS
   - INDICATION-CONTRAINDICATIONS
3. MULTIDIMENSIONAL ASPECTS OF PATIENT'S CONDITION
   - FAMILIAR SYMPTOM AND CONCORDANCE SIGNS
4. INDIVIDUAL ADAPTIVE ABILITY
   - STRESS AND ALLOSTATIC BIOMARKERS, LIFEMARKERS, PSICOMARKERS
   - SALUTOGENESIS INDICATORS (SOC)
   - SELF-REGULATIVE B-N-EM-CR-BPS FUNCTIONALITY (BIOMEDICAL FUNCTIONAL TESTS)

OSTEOPATHIC ASSESSMENT

TISSUE ALTERATIONS RELATED TO GAS AND SELF-REGULATORY CAPACITY (I.E. FASCIAL PATTERNS)

TISSUE ALTERATIONS RELATED TO LAS (I.E. SOMATIC DYSFUNCTION)

OSTEOPATHIC CARE - TREATMENT PLAN
- of the current session (integration of the maximalist or minimalistic approach with the symptomatic approach);
- of the entire treatment (frequency between sessions, ongoing management, etc.);
- sharing the plan with the person.

OSTEOPATHIC DIAGNOSIS

EVALUATION OF THE CLINICAL RELEVANCE HYPOTHESIS
STRUCTURE-FUNCTION PROVOCATION TEST
Integration of*
   - OSTEOPATHIC PALPATION FINDINGS
   - PHYSICAL EXAMINATION TESTS FINDINGS
   - BIOMEDICAL FUNCTIONAL TESTS FINDINGS
   - CLINICAL PREDICTION RULES
   - FAMILIAR SYMPTOM AND CONCORDANCE SIGNS

* OSTEOPATHS SHOULD CONSIDER SCIENTIFIC RESEARCH FINDINGS ON SIMILAR CLINICAL CONTEXT

SPECIFIC-MINIMALIST APPROACH
Direct, indirect, combined techniques; the activation force is coherent with dysfunctional tissue and model selection.

SYMPTOM BASED APPROACH
Techniques selected by research studies conducted on similar complaints and/or related to regional interdependence.

PROGRESSIVE INDIVIDUALIZED APPROACHES
Lifestyle, exercise and nutritional advice

SYSTEMIC-MAXIMALIST APPROACH
Systemic, homeostatic-adaptogenic techniques; the activation force is coherent with the overload function and model selection.

EVALUATION OF TREATMENT OUTCOMES AND MANAGEMENT OF THE PERSON
S/F model's selection

- Adaptive capacity
  - Allostatic overload biomarkers, psychomarkers, and lifemarkers

- Recurrent diseases

- Recurrent overloaded function

- Recurrent overloaded structure

- Manual evaluation

- Biomedical
  - Self-regulation systems overload assessment

- Osteopathic
  - Fascial compensation scheme
  - Fascial compartments pattern
  - Somatic dysfunction
### Allostatic overload biomarkers, psycomarkers, lifemarkers

**Biomarkers:** e.g. neuroendocrine, metabolic, immunological markers (McEwen, 2015)

**Psycomarkers:** Depression, anxiety and stress scales (Nilges and Essau, 2015)

**Lifemarkers:** e.g. Social Readjustment Rating Scale and sense of coherence scale (Ngai and Ngu, 2013)

### Self regulation systems overload assessment

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomechanical</td>
<td>postural control test (Bohannon et al., 1984)</td>
</tr>
<tr>
<td>Neurological</td>
<td>e.g. manual assessment tests of central sensitization (Nijs et al., 2010) and of autonomic nervous system tone (Cheshire and Goldstein, 2018)</td>
</tr>
<tr>
<td>Respiratory</td>
<td>i.e. respiratory rate and breathing patterns stiffness (Cheshire and Goldstein, 2018)</td>
</tr>
<tr>
<td>Circulatory</td>
<td>i.e. examination of the amplitude of the peripheral pulses and considering its relationship with arterial stiffness (Cheshire and Goldstein, 2018)</td>
</tr>
<tr>
<td>Energetic-Metabolic</td>
<td>gastrointestinal distress signs stiffness (Cheshire and Goldstein, 2018)</td>
</tr>
<tr>
<td>Psychosocial</td>
<td>i.e. Waddell’s signs (Conteno et al., 2004)</td>
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</tbody>
</table>
Osteopathic palpation findings

<table>
<thead>
<tr>
<th>FASCIAL COMPENSATION SCHEME</th>
<th>FASCIAL COMPARTMENT PATTERNS</th>
</tr>
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<tbody>
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<td>Osteopathic manual assessment</td>
<td>Adaptive capacity biomedical assessment</td>
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**Aliastatic overload biomarkers, psychomarkers, lifemarkers**

- Biomarkers: e.g. neuroendocrine, metabolic, immunological markers (McEwen, 2015)
- Psychomarkers: Depression, anxiety and stress scales (Nolges and Essau, 2015)
- Lifemarkers: e.g. Social Readjustment Rating Scale and sense of coherence scale (Nagi and Ng, 2013)

**Axial fascia (B-BPS)**
- Appendicular fascia (B)
- Meningual fascia (N-BPS)
- Visceral fascia (EM-CR)

**Somatic Dysfunction**

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<tr>
<th>Osteopathic manual assessment</th>
<th>Biomedical assessment</th>
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- **Table 3:** Spinal ranges of motion replicated during orthopedic and neurologic tests
  - Range of Motion
  - Tests That Use the Range
  - Soto-Hall, Lump
  - Hauert, Stump
  - Shoulder Depressor
  - Haupert, Lump Test
  - Kemp

- **Self regulation systems overload assessment**
  - Biomechanical: postural central test (Hokanson et al., 1964)
  - Neurological: e.g. manual assessment tests of central sensorimotor (Ho et al., 2010)
  - Respiratory: Lateral respiratory and breathing patterns (Sherin and Goldstein, 2010)
  - Circulatory: Lateral examination of the configuration of the peripheral nerves and considering its relationship with arterial stiffness (Sherin and Goldstein, 2010)
  - Energetic-Metabolic: gastrointestinal distress signs (Sherin and Goldstein, 2008)
  - Psychosocial: L. Moodell’s signs (Sherin et al., 2004)
Objective examination tests related to patient presentation

Objective examination tests related to self regulative activities

Osteopathic palpation outcomes:
- Somatic dysfunctions
- General fascial patterns

Multidimensional aspects of the consultation pattern

Clinical relevance hypothesis: technique’s selection

Structure/Function Interdependence Assessment
CONCLUSIONS: An OMT protocol that includes diaphragm techniques produces significant and clinically relevant improvements in pain and disability in patients with NS-CLBP compared to the same OMT protocol using sham diaphragm techniques.
BASE CLINICAL REASONING ON OSTEOPATHIC PRINCIPLES AND MODELS.

EVALUATE LOCALIZED FASCIAL SYSTEM ALTERATION (I.E. SOMATIC DYSFUNCTION) RELATED TO LOCAL ADAPTATION SYNDROME AND ALLOSTATIC OVERLOAD.

EVALUATE GENERALIZED FASCIAL SYSTEM ALTERATION (I.E. FASCIAL POSTURAL PATTERNS) RELATED TO GENERAL ADAPTATION SYNDROME, ALLOSTATIC OVERLOAD AND BIOMECHANICAL, CIRCULATORY-RESPIRATORY, NEUROLOGICAL, ENERGETIC-METABOLIC, BEHAVIORAL SELF-REGULATION SYSTEMS.

APPLY EVIDENCE BASED PRACTICE IN OSTEOPATHIC CLINICAL ACTIVITY CONSIDERING THE EXPECTATIONS AND VALUES OF THE PATIENT AND THE POPULATION.
SUGGESTED READINGS


6th “Open Forum for Osteopathic Education” Conference
18th & 19th October 2018 - Lyon, France

TEACHING
OSTEOPATHIC DIAGNOSTICS

“You are not a drop in the ocean. You are the entire ocean in a drop.”
Jalal ad-Din Muhammad Rumi