



## VISCERAL OSTEOPATHIC MANIPULATION

### WORKSHOP 1 - ABDOMINAL APPROACH

#### 1. INTRODUCTION & DEFINITIONS

**VISCERAL OSTEOPATHY:** It deals with visceral dysfunctions connected to the musculoskeletal component. The neurological part assumes great importance because the treatment will not be directed at the organ in question but will be aimed at the neighboring structures: it is not going to act on the parenchyma but on the means of fixation, the vascularization and giving neurological afferents that are linked to the part structural. We act precisely at the level of an organ when we target the muscular components of the organ (sphincters).

**VISCERAL DYSFUNCTION:** Modification of the structure of the organ due to various disturbances of the trophism and secretion of the organ. This change in the functionality of the organ is expressed in a change in volume, density, shape, position (ptosis), mobility (extrinsic) and motility (intrinsic).

**Mobility:** rhythmic movement passively induced from the outside, by:

- diaphragm thoracic,
- the cranial diaphragm (tentorius),
- the pelvic diaphragm.

It will have particular axes of movement which in physiology often coincide with those of motility. It is influenced by the tension of the fixation means and by internal pressures.

**Motility:** it is the intrinsic possibility of movement of the organ. It is expressed by drawing the organ towards the central line during inhalation and away during exhalation. It has been seen that it can be very linked to embryological development. The various organs are formed following directions: during final development the tissue performs a certain

intrinsic movement to reach its final position. It is the memory of movement during embryological development.

## 2. ORGANS MOVEMENTS

What allows organs to move? If there are muscles for the skeletal system, in the visceral system there is no musculature beyond its own: we therefore consider the bone tissue that contains it, the means of fixation and the sliding surfaces of the various organs. Each organ forms what are called visceral joints which allow each organ to move in relation to another, to do this there must be the possibility of movement between one organ and another thanks to the **sierous membranes** which are at the MENINGES , THE PERICARDIUM, THE PLEURA AND THE PERITONEUM. The peritoneum is the most complex part because it envelops all or almost all the upper visceral organs, up to the pelvic excavation. It has protection, containment and absorption functions.

### MEANS OF UNION AND FIXITY

- **TURGOR EFFECT:** the ability of each organ to occupy more available space, always depending on its ligaments and its vascularization, which also creates means of fixation such as the hepatic hilum.
- **INTRACAVITY PRESSURE:** sum of the pressures of the viscera which must be balanced with the extracavitary pressure which must be balanced with the force taken, the force of gravity and the tension of the abdominal wall. These two form a fairly unitary column of internal organs which balance their internal pressure with the external one. The diaphragm muscle keeps the pulmonary part distended and has a suction effect on the visceral part, especially the viscera most in contact with the diaphragm and this allows the load to be reduced at the level of the first visceral organs (especially the liver which can reach a weight of 2/3 Kgs, loses 1Kg with this effect and places less strain on his ligament fixation devices).
- **LIGAMENT SYSTEM:** we have duplication by the sierosa layers which anchor to the bone structures.
- **MESI:** more structural means of fixation which are duplications of the peritoneum which have their very strong anchoring at the level of the posterior abdominal wall (root of the mesentery). Their alteration can cause many problems from a postural point of view. An organ becomes fixed when this organ palpably does not have much movement.

## **FIXATIONS:**

Alterations of the density and movement. Fixations can be of 3 types: ligamentous, articular, and muscular.

- **ARTICULAR:** joint dysfunctions are due to lesions of the serosa, for example after surgery or after a bacterial infection, for example, thus creating points of fixity which causes the axes of movement to change.
- **LIGAMENTOUS:** we can have an increase in the tension of the fixation means that bind an organ to a structure; in other cases there may be laxity of the ligament system which leads to the migration of a certain organ to another location (ptosis - prolapse);
- **MUSCULAR:** those organs that have a double layer of muscles. A spasm (visceral spasm) is created at the muscular level (of the common bile duct for example due to a stone downstream of the obstruction, or colics) of the organ.

## **3. POSTURAL CONSIDERATIONS**

The orthostatic posture is a result of the integration of the tonic-postural system (neuro-muskuloskeletal) 'posteriorly' and the visceral system 'anteriorly'. They need to balance and compensate constantly.

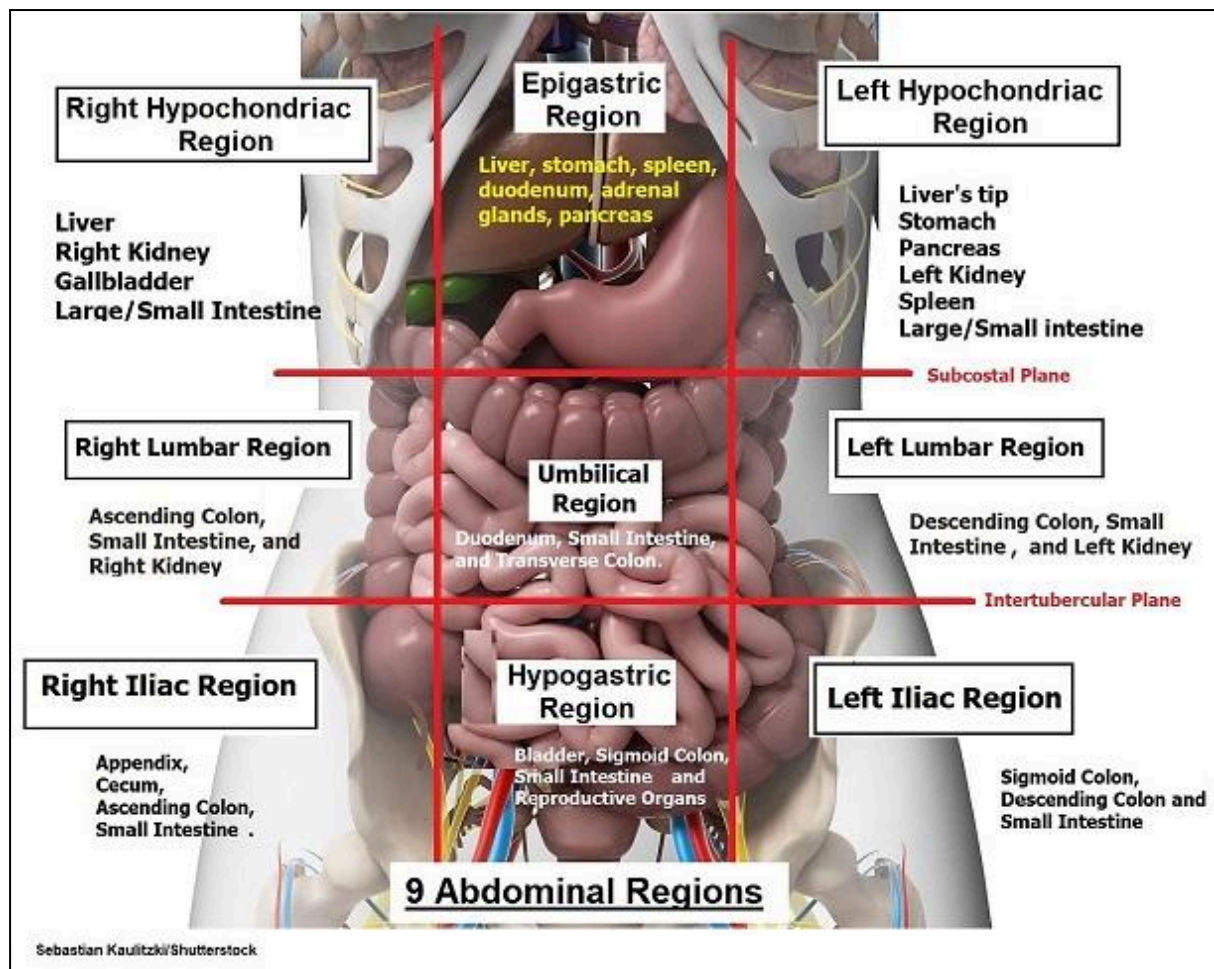
An example of this integration is when we have a visceral inflammation or spasm, the postural system needs to adapt and compensate on that area/organ with closure posture to minimize the painful source/trigger. In the visceral system anything which is creating distension (lengthening) of the affected area will trigger pain.

## **4. ABDOMINAL NOMENCLATURE**

2 main approach areas:

- Anterior area, STERNOPUBIC, between the sternum and pubis, limited by the rectus abdominis.
- Lateral area, COSTOILIAC, between ribs and iliac crests (R and L sides).

9 subdivision of the abdominal cavity:



## 5. VISCERAL OSTEOPATHY CONTRAINDICATIONS

### ABSOLUTE:

- Inflammatory diseases (hepatitis, acute and chronic pancreatitis)
- Cardiovascular diseases (aortic aneurysm, trombosis)
- Recent abdominal Surgery
- Ascitis

### RELATIVE:

- Gallbladder stones, Kidney stones
- Herniation (inguinal area for inguinal herniation, umbilical region for umbilical herniations)
- Pregnancy (small pelvis early months, whole abdominal area for later months)

## 6. ABDOMINAL EVALUATION

### A. ORTHOSTATIC ASSESSMENT

**Observation orthostatic:** Check scars (laparotomy/laparoscopy), swelling, bruising, masses LL and AP scheme, areas of tension or expansion.

**Observation of diaphragmatic expansion,** movement of the abdomen/thorax during breathing, general and specific areas.

**Palpation:** palpatory testing of general and specific areas of the abdomen/thorax. Paying attention to areas of tenderness/pain and possible spasm.

**Integration with MSK structure:** movements of the lumbar spine, pelvis (SIJ tests and hip tests), thoracic spine, ribcage. Facilitation (manually) of the area of fixation/restriction in the abdomen and integration with the movements (macro/specific) of the MSK structures. See also point 3-postural considerations.

### B. SUPINE ASSESSMENT

**Observation of the abdomen/thorax** with patient in supine position on the bed, with support for the head and knee in flexed position/extended depending on the tension of the abdominal wall.

**Palpation supine:**

- **Superficial general + Specific of the 9 areas** Approach with hand on the abdomen to discriminate the various layers, creating density on the cutaneous tissue, connective tissue in between the adipose and muscular tissue and then entering into density with the peritoneal and visceral area.

The palpation is mediated by body weight, the force of the push comes from the direction of the forearm because otherwise I will stiffen the hand.

Centrally we will have transverse colon, small intestine, pancreas, duodenum. After the physical examination, evaluate whether it is treatable or not treatable externally, whether the patient accepts to be treated for the pain or not. If there is severe abdominal pain, it is not treatable. Acute pain is best left untreated, especially if it is recent.

Palpatory examination can be done with legs extended or semi-flexed depending on how much abdominal tension we find. With one hand superimposed on the other, a palpation is carried out which follows the antiperistalsis, starting from the sigmoid area, moving on to the descending, transverse and ascending colon, more

superficially. The bottom hand is relaxed (listening hand) and the top hand is the driving hand.

- **Piano Key palpation** - To detect areas of spasm, irritation, tension (see previous bullet point)
- **Landmark points** (sphincters, passages, specific organs - will see in next workshops)
- **Fascial listening** - One hand/ 2 hands.

#### **Clinical screening tests:**

- **Aorta Test & Palpation:** Osteopath stands sideways to the patient (left side preferred, as on the R side there is the Cave Vein), asking them to bend their legs and raise their head from the pillow while my hands are lateral to the rectus of the abdomen. Going medially and deeply (slowly and gently), until we find the heartbeat at the medial level. With elderly people we have to try to be very delicate. It must be deep enough, almost at the projection of the spine. In a aneurism of the aorta (AAA) we could feel a greater width of the aorta and therefore find a pulsation more laterally. we could then almost feel a weakening of the heartbeat in that area. Those are sign of AAA.
- **Blumberg's Sign for peritonitis**
- **McBurney's Sign for appendicitis**
- **Murphy's Sign for Cholecystitis (and or Gallbladder stones)**
- **Inguinal hernia test (standing)**

