

## What is Visceral Manipulation?

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What do the pleura, the parietal peritoneum, the capsule of the liver, the gall bladder, the subclavian muscle, the pericardium and the capsule of the shoulder joint and C4 all have in common? (answer at the end)

The focus of orthopaedic education for physiotherapists has been the study of how the structures that lie behind the spine influence the spine's mobility and function. The curriculum presented in the Visceral Manipulation Program offers a method for assessing and treating the influence of those structures that lie in front of the spine. Those influential structures can include organs and their fascial attachments, peritoneum, the greater omentum or blood vessels. Gail Wetzler, PT, Director of the Department of Visceral Manipulation for the Barral Institute in Florida, describes Visceral Manipulation as "organ specific fascial mobilization."

In 1988, I studied Cranio-Sacral Therapy which introduced me to a whole new way of palpating and assessing the health of various tissues such as meninges (dura mater). I began to understand the difference between palpation and sensation, movement versus motion. It was a natural progression to pursue training in Visceral Manipulation and develop a more holistic approach to the assessment and treatment of dysfunctional anatomy.

Visceral Manipulation was developed by Dr. Jean-Pierre Barral, a Registered Physical Therapist and Osteopathic Physician since 1974. He holds many positions including Director (and Faculty) of the Department of Osteopathic Manipulation at the University of Paris, School of Medicine, in Paris, France and Chairman of Department of Visceral Manipulation on the Faculty of Medicine Paris du Nord. He developed this form of manual therapy based on his theory that each internal organ rotates on a physiological axis. Each internal organ also has a relationship through fascial attachments to the spine. Today, his Visceral Manipulation courses are taught around the world by certified teachers who successfully complete a rigorous training program with Dr. Barral. His cadre of teachers is exceptional.

Consider the following orthopaedic dictum: any structure that crosses a joint has the ability to restrict that joint. It is certainly true for muscle. This also holds true for organs. Dr. Barral's in-depth study of patterns of stress in tissues of cadavers at the Lung Disease Hospital in Grenoble, France complemented his interest in biomechanics in living subjects. He recognized the potential for the organ system to create lines of tension within the body. This observation was fundamental to his development of Visceral Manipulation. His interest was also piqued when a client confirmed he felt relief from back pain after going to an "old man who pushed something in his abdomen." Since that time he has worked with researchers in France and North America

to create evidence-based data, documenting changes in the viscera with the use of x-ray fluoroscopy, endoscopy, doppler and ultrasound before and after manipulation of the organ.

How do organs become restricted? They can become restricted by a direct trauma (fall on a soccer ball), acute/chronic illness (pneumonia), absorbing the force of a MVA (seat belt trauma), or following an infection or after surgery. We take approximately 24,000 breaths a day. Our heart beats 120,000 times per day. Any lack of mobility in these structures could promote chronic spinal restrictions – e.g. the attachment of the pericardium to the lower cervical and upper thoracic spine via the thoraco-pericardic ligament. The same relationship occurs for the attachment of three ligaments (costo-pleural, transverse-pleural, vertebro-pleural) at the apex of the pleural dome to the cervical spine (C6/C7/T1).

The mesenteric root of the small intestine can limit the mobility of the spine as it crosses the third and fourth lumbar vertebra. A mechanical restriction at the first lumbar vertebra may be influenced through constant irritation of an old appendectomy scar stimulating the autonomic nervous system. The cecum/appendix and L1 share this viscerosomatic interchange. Decreased flexibility of the fascial connection between the bladder and the head of the femur can limit the mobility of both structures. Chronic dysfunction of the right and left sacro-iliac joint can result from decreased mobility of the cecum and sigmoid respectively. A ptosed kidney on the anterior surface of the psoas muscle can compress one of five nerves (e.g. ilio-inguinal) in the vicinity.

It is speculated that up to 90% of musculoskeletal problems have a visceral component. The spinal restriction and the organ dysfunction often will be treated together in a session. Orthopaedic manual skills and specific exercise programs remain integral to the treatment of a client. Visceral Manipulation complements these skills.

The key in Visceral Manipulation is to find the most significant area of reduced mobility. A restriction will pull the surrounding tissue towards it. With training, your hand will feel the pull of tissue to the area that is causing the greatest mechanical tension in the body. You will also learn to evaluate visceral mobility - the ability of an organ to move freely in three dimensions in its anatomical environment. In addition, you will be able to feel visceral motility - the organ's inherent tissue motion. Like joints, organs must move to stay healthy. They have sliding surfaces that articulate with each other, with muscles, with ribs and with the spine. You will be able to ascertain what is normal or abnormal. This is not unlike what we learn about joints. The efficacy of treatment depends on the accuracy of your assessment and the specificity of the application of gentle manual forces in three dimensions to promote the health of the organ and relief of restriction in the body. There can be an immediate response to treatment or a response that becomes apparent over several weeks time as the body unravels a long standing restriction.

I cannot imagine my practice without these tools. It is exciting, rewarding and challenging. Visceral Manipulation tests your knowledge of anatomy and inspires you to learn more. I invite

you to be curious and learn to look inside the body for possible organ specific fascial restrictions that may be causing spinal dysfunction. For more information about the Visceral Manipulation Program, the Barral Institute and the availability of courses in your area I encourage you to visit [www.barralinstitute.com](http://www.barralinstitute.com).

*(The answer to the opening question is the phrenic nerve. It is food for thought.)*

Judy Russell graduated from UofT in 1978, and has since developed her orthopaedic skills and acquired her Sports Physiotherapy Diploma. She currently practices at Jericho Sports and Orthopaedic Physiotherapy Clinic [www.jerichophysio.com](http://www.jerichophysio.com)