



UPPER CERVICAL TECHNIQUES



PETTIBON TECHNIQUE – Dr. Burl R. Pettibon

Dr. Burl R. Pettibon

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Dr. Pettibon is founder of the Bio-Mechanics Institute and of the Spinal Technologies Company, which designs, manufactures and markets spinal rehabilitation products for health professionals. The Bio-Mechanics Institute has funded much research, which has resulted in a special lightweight hand-held adjusting instrument amongst other rehabilitation equipment and associated procedures. From 1991 to present Dr. Pettibon has designed and introduced the Wobble Chair™, Linked Exercise Trainer™, Negative Z Skull on Atlas Adjuster™, Pettibon Weighting Systems™, Pettibon Tendon Ligament Muscle Stimulator™ and various traction devices. He has published numerous papers and books and has received many honors and awards. In the past 35 years he has developed over 35 chiropractic clinics, and is active in teaching at the Pettibon Bio-Mechanics Institute.

In researching upper cervical approaches I did find that Pettibon was frequently mentioned as an upper cervical technique, however according to Dr. Pettibon's wife Sharon, "Pettibon is not an upper cervical technique. We X-ray the entire spine and adjust the entire spine and most importantly, we have a complete rehabilitation program to insure that it remains fixed. However, having said that, Dr. Pettibon has always adjusted the atlas and was one of many pioneers of the specific atlas adjustment done with an instrument based on mathematical settings. He also adjusts the axis spinous and his spine model of the normal spine is famous. His research shows the spine moves globally, not individual segments as most believe. He also advises that if the soft tissue is not considered then the adjustment will not hold. He adjusts the TMJ and all segments to include extremities. The name is well known and for many years he has been known as an upper cervical practitioner although it was not accurate. He is also famous for a weighting system for the body that forces the weak muscles to work thereby holding the spine in alignment and strengthening the soft tissue."

I particularly was interested in a statement from Dr. Pettibon's website following and the view that adjustments may not hold due to injuries to soft tissue not being addressed. My own personal experience revealed a need to address muscle rehabilitation. My suggested wellness approach advocates cervical and shoulder muscle rehabilitation as it makes total sense that injuries to the spine can and do result in atrophy and do disrupt ligaments and muscles responsible for maintaining the integrity of the spine. Thus spinal column alignment changes will result in muscle strength changes on both sides of the spinal column, with one side trying to compensate for the other side.

From the Pettibon website: "3) MUSCLES: Muscles are responsible for the integrity of all joints and therefore the position of the upright spine. If your corrective procedure does not include muscle rehabilitation and maintenance of the muscles involved in the subluxation complexes, there is no chance of permanent spinal correction."

I found that the Pettibon approach agreed with a lot of my own conclusions about the behaviour of the spine thus I am convinced that it is very important that I include the Pettibon approach in my list of upper cervical techniques. Whilst it may not 'solely' deliver adjustive forces to the atlas, as with other upper cervical techniques, the focus of Pettibon is on the requirement for an upright position of the skull relative to the cervical spine, and the innate realignment of the spine as a complete global unit underneath the skull. These are the stated goals of 'specific' upper cervical chiropractic approaches and adjustment techniques and are consistent with my firm

belief that the human skeleton is “top down design” and therefore the innate organizing and ‘righting’ forces are responsible for ensuring that this design is maintained in order to prolong one’s life force.

Dr. Pettibon, in a paper “Historical Perspective” details his conclusions that it is “increasingly apparent that all chiropractic techniques ... could not produce permanent spine and postural change.” Following this he began research with Dr. Vern Pierce to “determine the truth about chiropractic procedures.” As a result of this research he “found that the living spine could not be permanently changed by adjusting/manipulation or braces.” But he did conclude that “the patients’ innate organizing energy can permanently change and correct or displace the spine, but only after a change is produced.” He further states, “These findings INVALIDATED conventional chiropractic procedures.” And “many of the procedures taught in chiropractic colleges produce only a small increase in range of motion.” He cites references, which indicate, “When a muscle is suddenly stretched, a strong signal is transmitted to the spinal cord, causing an instant and very strong reflex reaction in the same muscles from which the signal originated”, thus indicating that spinal changes as a result of chiropractic adjustments will not be permanent.

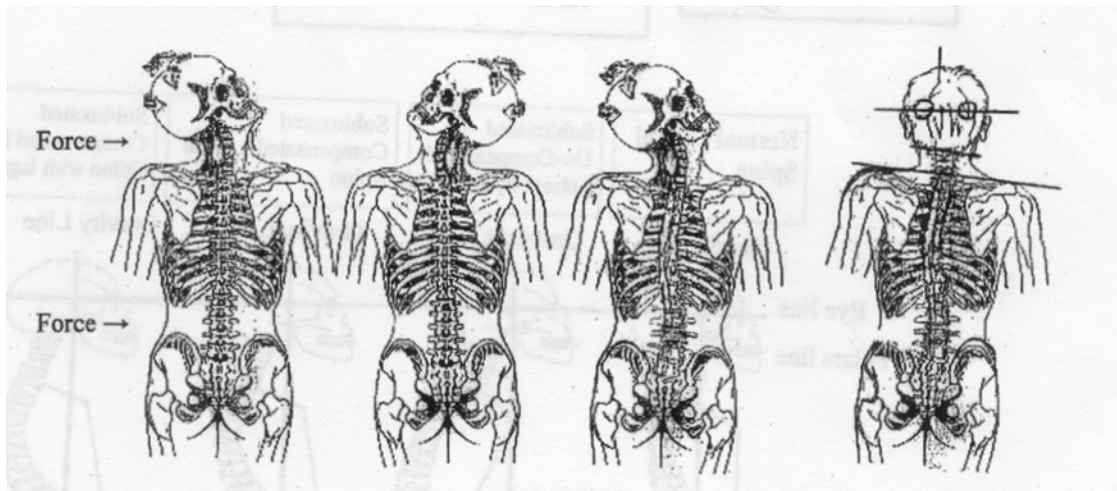
He is concerned that research, which would prove whether one chiropractic technique is better than the other, is not undertaken by chiropractors. Prior to reading this paper I had already formed an opinion as to how to approach chiropractic research, which is in line with Pettibon’s desire to see techniques validated by scientific research. I also am concerned as to the sheer number of chiropractic techniques. It’s overwhelming and confusing to patients at the very least.

PETTIBON CHIROPRACTIC

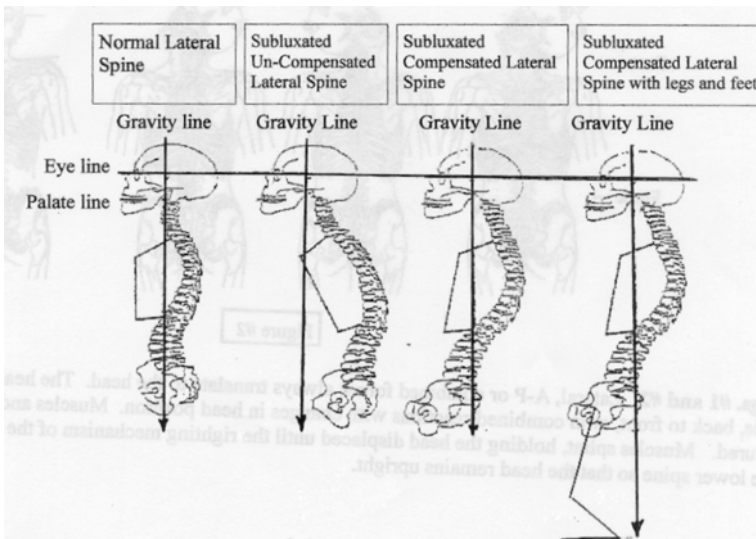
The Pettibon approach is unique, but in reading about it I did conclude that it does integrate much of the view of upper cervical chiropractors. Pettibon lists those aspects which explain why “under the influence of gravity” ... “**there is a need** to displace the lower spine into subluxated postures, which is often necessary, in order to maintain the skull upright relative to its gravitational environment.” Pettibon says that a “person’s nervous system has five righting reflexes in order to supply skull and spine positional information to the system holding the head upright.” Further “Acting on this information the lower spine is either aligned or mis-aligned as needed to maintain the head erect.” This realigning affect on the spinal column can be seen in Daniel Clark’s illustrations elsewhere on my site and in Dr. Pettibon’s diagrams following. The five righting reflexes listed are:

- A. Labyrinthine reflex – inner ear fluid, input to the medulla.
- B. Optic reflex – keep head orientated correctly to gravitational environment
- C. Neck righting reflex (joints in neck) – keep body oriented to head
- D. Body righting reflex #1 – body’s surface receptors – orientation in space [proprioception]
- E. Body righting reflex #2 – orientation of the head to the body (midbrain)

According to Pettibon, “the righting reflexes and innate organizing energy” cause the lower spine to be “reorganized in time in order to hold the head upright with respect to gravity (front to back and side to side).” Further when the “righting reflexes are activated ... the nervous system” will “contract and relax muscles as needed to faithfully reposition the displaced head upright even if it requires displacing (subluxating) the lower spine and posture. Spine and posture displacements are referred to as the ‘spinal system subluxation complex’ (SSSC) by those practicing Pettibon Chiropractor procedures.” (Refer far right figure of the following diagram).



Pettibon highlights the importance of Lordotic Spinal Curves Correction for ALL spine and posture correction. He refers to White and Panjabi as concluding in their studies “that normal spinal motion is coupled motion and that it is dependent on opposing lordotic and kyphotic curves in the spine.”



He discovered that “loss of cervical lordosis is **preceded** by skull locked in extension on C-1, causing forward head posture and loss of lordotic curve (see opposite). In the event the skull is locked in flexion on C-1, the cervical lordosis buckles into an ‘S’ curve, with the lower cervicals buckling into kyphosis.”

Note: I have long considered that the kyphosis on some elderly people is a direct consequence of, and compensation for their obvious forward head posture. The further forward the head posture, the more

pronounced the thoracic kyphosis. These changes in patients, I postulate are responsible for compression of the brachial plexus of nerves and arteries in the neck (carotid and vertebral), which in turn can produce the many symptoms associated with Cerebral Thoracic Outlet Syndrome (CTOS) – “Neck and brain transitory vascular compression causing neurological complications”; Fernandez Noda et al; Journal of Cardiovascular Surgery; 1996;37 (Suppl. 1 to No. 6); Pages 155-66.

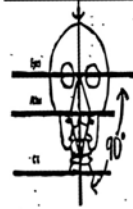
In observing the posture of Pope John Paul II, who is suffering from Parkinson’s disease, I have to conclude that he exhibits the ‘classic’ upper cervical (atlas) subluxation and resultant lower spine compensatory subluxation. I also note that in the same CTOS papers it is suggested that Parkinson’s disease-like symptoms are attributed to “faulty irrigation of blood supply and oxygen of the cerebellum and basal ganglia of the brain”, resulting in “a decrease in the secretion of dopamine at the level of the putamen”. I think this adds further weight to the work of Erin Elster, D.C. www.erinelster.com in the consideration of Parkinson’s disease being a direct consequence of atlas subluxations. I would further suggest, that because of the ‘link’ between upper cervical subluxations and hearing disorders, the Pope is more than likely exhibiting partial deafness and most probably tinnitus.

The end result of the “initiating event subluxation” as Pettibon calls it is a reaction of the body to make the required compensatory changes in the spinal column in order to maintain the skull

“vertebrae” upright relative to gravity. This STEP-BY-STEP subluxating process is described below, in an extract from Page 1-5 of Pettibon’s paper.

1) Optimum position of the skull and eyes relative to gravity (Fig. #1).

Figure #1



2) When the skull and eyes (Spinal Unit #1) become even slightly out of alignment with gravity, then the righting reflex’s neural chain of responses are induced (Fig. #2).

Figure #2



3) The righting reflex and neural responses cause the neck, down to C-5 (Fig. #2), to be misaligned as needed in order to realign the skull with gravity (Fig. #3).

Figure #3



4) Coupled, meaning lateral and rotatory, shift of Fig. #2 causes a compensating rotatory lateral shift in the upper thoracic spine and shoulders (Fig. #3) in the opposite direction.

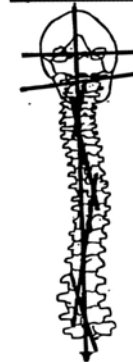
Figure #4



5) Rotatory shift of the shoulder girdle (Fig. #3) causes the lower thoracic and upper lumbar spine, T-7 to L-3, to shift in a corresponding opposite amount and direction (Fig. #4).

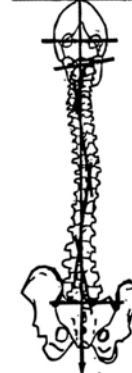
6) The lateral and rotatory shifts above cause L-4 to L-5 (Fig. #4) to laterally rotate and shift in the opposite direction (Fig. #5).

Figure #5



7) The entire pelvic girdle (Fig. #5) must respond to the changes above. This balancing act displaces the pelvic girdle with one ilium rotating forward and high while the opposite ilium rotates backward and down. Opposing ilium rotations coupled with the displacement forces from above usually cause the sacrum apex to flex on the L-5. This force often causes L-5 to displace posterior, while the spine above moves forward with a loss of its lordotic curve (Fig. #6).

Figure #6



This describes the compensated subluxation pattern. The spine may also be subluxated into more complicated non-compensated and un-compensated patterns also.

THE PETTIBON BODY WEIGHTING SYSTEM™

Once the lower spine has been subluxated through ‘righting’ and ‘compensatory’ forces initiated and applied by the nervous system, it can, according to Pettibon, be corrected using the same energy that subluxated the spine in the first place. Pettibon says that, “Permanent spinal correction requires that the nervous system has a ‘NEED’ to change and correct the lower spine. The Pettibon Body Weighting System™ (PBWS) provides that ‘NEED’.”

PBWS utilizes patented head, shoulder and hip weighting systems for patient rehabilitation, as well as spine and posture corrective adjusting. The system starts with head and shoulder weighting then the use of hip weighting to “correct lumbo-sacral displacements and high rotated hips.” In layman terms PBWS utilizes various weights applied to a patient’s head, shoulders and

hips to initiate the 'righting reflexes' of the body discussed earlier in order to correct the postural imbalance and "re-balance muscles while restoring their strength and endurance."



Figure #4

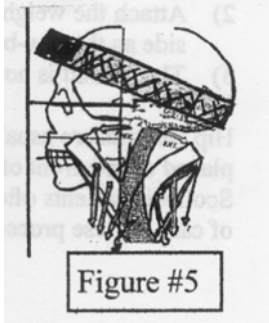


Figure #5

Figures #4 and #5 - "Shoulder and head weighting corrects and stabilizes the thoracic cage, then frontal head weighting causes a reflex over-rotation upward of the skull and eyes by the cervical extensor muscles. The upward rotated eyes/skull activate the optic and labyrinthine righting reflexes, as well as joint receptors in the neck. These activated righting reflexes then cause the cervical flexor muscles to pull the skull and eyes down and level."

According to Pettibon "By using the Pettibon head-shoulder and hip weights, we can re-program and/or alter the sensory information that the righting reflexes are sending to the central nervous system." Further whilst these weighting procedures may produce spinal correction in minutes it can take up to 90 days of twice daily, 20 minute weighting sessions (at home) for permanent correction. "During the 90 days, the spine and posture changes become increasingly more permanent as the spinal tissues are strengthened in their optimum position" and further "ligamentous creep is used in the Pettibon Clinical procedures to cause permanent spinal corrections. Pettibon head and body weighting procedures force the patient's own muscles to hold their spine in it's corrected position while the discs and ligaments reform by creep into

optimum alignment."

Pettibon further cites scientific papers that prove his Chiropractic procedures and methods to be scientifically sound. The utilization of the Pettibon Chiropractic Procedures™ he says "provides the chiropractic doctor with a complete system of skull-spinal displacement subluxation detection and correction." The procedures involve X-ray examination including 7-views, accurate and scientifically proven patient positioning during X-ray, accurate measurements, testing & weighting procedures, visual examination, assessments and checking of the effectiveness of the initial procedures.

In conclusion, the Pettibon approach when combined with what is already known about 'specific' upper cervical chiropractic provides a powerful and compelling argument for the allocation of significant research funding towards research into Chiropractic. To do anything less would be contrary to the interests of sick people worldwide.