

Q&A

**FOR HEALTH PROFESSIONALS ONLY
NOT FOR PUBLICATION**

The Gravity Guiding System® Six Posture Program and the Martin Inversion Therapy Techniques

GRAVITY GUIDANCE, INC.

150 South Los Robles Ave.

Bin #7127

Pasadena, CA 91109

FOR HEALTH PROFESSIONALS ONLY
NOT FOR PUBLICATION

THE GRAVITY GUIDING SYSTEM®
SIX-POSTURE PROGRAM
and the
MARTIN INVERSION THERAPY TECHNIQUES

BY:

ROBERT M. MARTIN, M.D.

ROBERT M. MARTIN II, M.D.

JING LING DAI, M.P.H.

YOU, THE HEALTH PROFESSIONAL MAY ASK . . .

Q. What is the Gravity Guiding System®?

A. The system is essentially the Martin Six-Posture Program or Decompression, Mobilization, Conditioning Program (DMCP), comprised of corrective biomechanical exercises developed by Robert M. Martin, MD, a specialist in back problems and a former gymnast.

Dr. Martin's popular inversion therapy, using the Gravity Guiding System equipment, is an essential component of his program. The Gravity Guiding System products were originally invented by Dr. Martin for his patients' use, to maximize his inversion techniques.

The equipment helps to facilitate and accelerate rehabilitation, in addition to giving patients an opportunity to continue self-maintenance at home.

Q. What does the Gravity Guiding System product line consist of?

A. Essentially, it consists of the Gravity Guider® apparatus and accessories and the Inversion Boots™ ankle holders.

Q. What is so unique about the Inversion Boots?

A. The Inversion Boots are the cornerstone of the Gravity Guiding System. They provide patients for the first time with free inverted suspension by simply hanging from the legs with Inversion Boots ankle holders hooked onto the Inversion Bar Doorway Frame Support Rod™ or Gravity Guider® apparatus, so they can do inverted exercises with total mobility. This full-body, suspended inversion enables "hands-on" mechanical therapy by the therapist with the spine unloaded or decompressed.

The Inversion Boots are safe, comfortable, and adjust to any size, giving patient security while hanging upside down.

Q. What are the six postures?

A. Erect, flexed, lying (supine), extended, inverted, and brachiated (hanging from the arms or from the legs). These postures are also called erection, flexion, horizontal, extension, inversion, and brachiation.

Q. What are the benefits of the Martin Six-Posture Program?

A. In general, the program benefits overall physical fitness and it may quickly relieve back and joint pain if exercises using the Gravity Guiding System® equipment are done properly.

According to Dr. Martin, back pain comes from attrition and compression of posture. By hanging, decompression results by separating the vertebral joints instead of compressing them, which means taking the pressure off the discs and surrounding tissues for a while and alleviating back pain. The conventional three postures of sitting/standing, bending over, and lying restrict range of motion (postural deficit).

The differential postures of extension, brachiation, and inversion (postural exchange), used by Dr. Martin, enable the joints to move more freely with less resistance, thereby relieving pain resulting from compression. The rhythmic oscillation, compression and decompression, "pumping and dumping," pressure on and pressure off, has a "milking" effect that we believe elicits numerous reactions from the neuro-musculoskeletal structure and the fluid systems by helping to promote fluid exchange by altering tissue fatigue.

Q. Does the Gravity Guiding System really work in the treatment of back disorders?

A. Dr. Martin and his staff have treated thousands of patients successfully in the last 14 years, some with severe back disorders. Most of these patients had previously exhausted all other avenues of medical help. Some have had multiple back surgeries; others are non-responsive to traditional treatment modalities. Many of the severely disabled patients have returned to normal activities.

Many physicians across the country find increasing evidence of the efficacy of inversion therapy, using the Gravity Guiding System, in the treatment of common back problems, often with quick pain relief and mobility once thought impossible.

Q. Do physicians prescribe the Gravity Guiding System?

A. Yes, physicians of various disciplines from all over the world. As more and more professionals become familiar with the system and broaden their expertise, you will see an increased use of this alternative, conservative therapy modality for common back disorders.

Q. Who uses the Gravity Guiding System®?

A. Currently, the Gravity Guiding System is used by specialists in sports medicine, neurosurgeons, neurologists, orthopaedic surgeons, physiatrists, rheumatologists, psychiatrists, general practitioners, osteopaths, chiropractors, physical therapists, universities, both civilian and military hospitals, VA hospitals, professional sports teams, homes for brain-injured children, schools, athletic and health clubs, and individuals (including eminent physicians), worldwide.

Q. Does Dr. Martin's program include any adjunct therapy?

A. Yes, depending upon the patient's condition, ultrasound, diathermy, and medications (pain and anti-inflammatory) may also be prescribed.

Q. Are there studies being conducted?

A. Yes. Since the body of knowledge concerning the benefits of the Martin Postural Therapy Techniques, especially inversion, has been mostly by word-of-mouth, independent studies are in progress at leading institutions on the cardiovascular, neurophysiological, and electromyographic responses to inversion, using the Gravity Guiding System products.

We get regular requests from researchers, including eminent scientists, wanting to conduct studies on various aspects of Dr. Martin's inversion therapy.

Independent clinical studies, both retrospective and prospective, are being conducted on the safety and efficacy of the Gravity Guiding System in the treatment of neuro-musculoskeletal disorders at Kaiser Permanente Medical Center by Ronald Rothman, MD, FAAPMR, principal investigator. Dr. Rothman, a physiatrist and rheumatologist, has used the Gravity Guiding System for 4 years without medical incidents. He is completing Phase 1 - Blood Pressures of Normotensives and Treated Hypertensives. His report is forthcoming.

Independent clinical studies are also being conducted at Dr. Martin's Musculo-Skeletal Clinic in Pasadena, California.

Studies involving patient populations are time-consuming because follow-up is required but reports, including cardiovascular studies, are forthcoming. Until then, our clinical experience could serve as a guide.

Q. What are the indications for Martin Inversion Therapy?

A. Specific indications are not listed at this time pending completion of clinical studies.

Dr. Martin and his sons, Robert M. Martin, II, MD, and Craig Martin, MD, and clinical staff, however, limit their practice to the treatment of neuro-musculoskeletal disorders. Numerous physicians throughout the country are treating other conditions rather successfully.

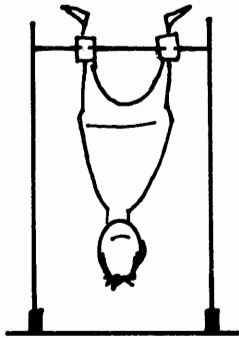
- Q. Are there any medical side effects?
A. Thousands of patients have been treated at Dr. Martin's Musculo-Skeletal Clinic and by other physicians throughout the nation without medical incidents.
- Q. Can individuals with controlled hypertension invert?
A. Yes, if the high blood pressure is controlled. Clinical practice leads one to believe inversion brings about homeostasis of the vascular system. Blood pressure rises during complete inversion, consistent with any exercise, but returns to normal after a brief period of rest, as in normotensive individuals. (See Fig. 1)
- Q. Could inversion precipitate cerebral hemorrhage or a stroke?
A. You do not have to worry about having a stroke or cerebral hemorrhage, according to J. Patrick Meehan, MD, PhD, an authority on gravity's effect on the cardiovascular system. Dr. Meehan says the skull or cerebral cage protects the cerebral circulation up to 5g or 5 x the loading(3). (See Fig. 2)
- Q. Would inversion, due to the increased pressure in the head, be deleterious to patients with aneurysms?
A. This is not a real factor unless the aneurysm is symptomatic. A person apparently is no more likely to have a stroke during inversion than when coughing(4), engaging in sex, having a bowel movement, or running up the stairs.

Inversion pressure involves venous return rather than arterial involvement and aneurysm bleeding is usually caused by a sudden, sustained rise in arterial blood pressure.

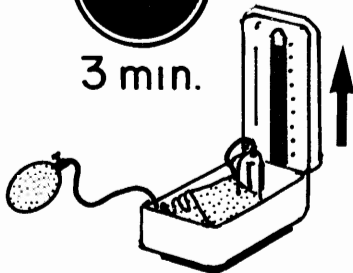
". . . You need not worry that your blood pressure is so high that it will eventually burst a (normal) vessel. The blood pressure apparatus used today measures blood pressures up to 300mm (Hg), and actual experiments have shown that it takes a pressure of 3,000mm to burst a blood vessel(5)."

In normotensive individuals, the blood pressure is usually stable during inversion activities. Blood pressure could rise consistent with exercise in normotensive and controlled hypertensive patients, but the blood pressure returns to normal or to baseline level by reflux return after a brief period of rest.

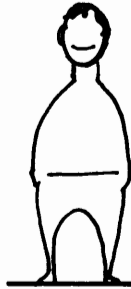
Inverted



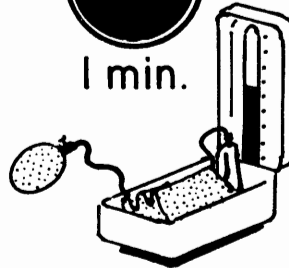
3 min.



Standing

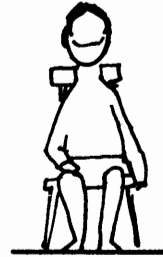


1 min.



or

Sitting



Returns to
Normal

FIGURE 1 — BLOOD PRESSURE GOES UP; BLOOD PRESSURE GOES DOWN — According to a study conducted by Dr. Ronald Klatz of the Chicago College of Osteopathic Medicine, the average blood pressure (b/p) of 20 healthy students before inversion was 119/74 and during inactive inversion after 45 seconds, the b/p went up to 157/93. The b/p went down during the 3-minute inversion to 148/90 and quickly went back to normal after only one minute in the upright position, to 123/75(1).

NOTE: Inversion pressure involves venous return rather than arterial involvement. "Studies of the circulatory effects of the head-down position have revealed venous, and to a lesser extent, arterial hypertension in the head to be among the most important changes."
--Wilkins, R.W.(2)

The Cerebral Cage (Skull) Protects the Cerebral Circulation.....

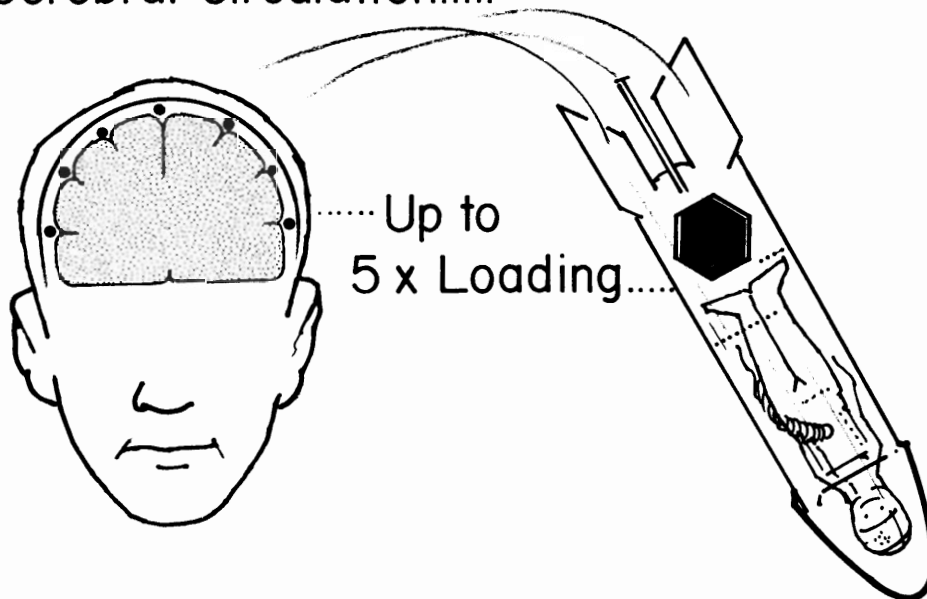


FIGURE 2 - INVERSION DOES NOT CAUSE CEREBRAL HEMORRHAGE - J. Patrick Meehan, MD, PhD, director of the Human Centrifuge Lab at the University of Southern California School of Medicine since 1954, NASA consultant, and an authority on gravity's effects on the cardiovascular system, says, "Inversion exercises are not dangerous, as the cerebral cage or skull protects the blood vessels from bursting."

A Wright-Patterson Air Force Base study on the physiology of negative acceleration states, ". . . protection against brain hemorrhage is given by the closed box of the skull. This is so effective that unprotected animals of human proportions can be exposed to negative 15g without rupture of the blood vessel, and no case of cerebral hemorrhage has yet been demonstrated following negative acceleration uncomplicated by asphyxia or trauma to the head. It is suggested that the danger of cerebral hemorrhage has been overestimated and that the risk of such an accident following exposure of a human to (negative) 5g are vanishingly small(3)."

"The fear of having a stroke or cerebral hemorrhage is not justified," says Dr. Meehan, noted author and professor of physiology and biophysics at the University of Southern California, who has done extensive experimental work in acceleration concerned with protection against effects of high acceleration.

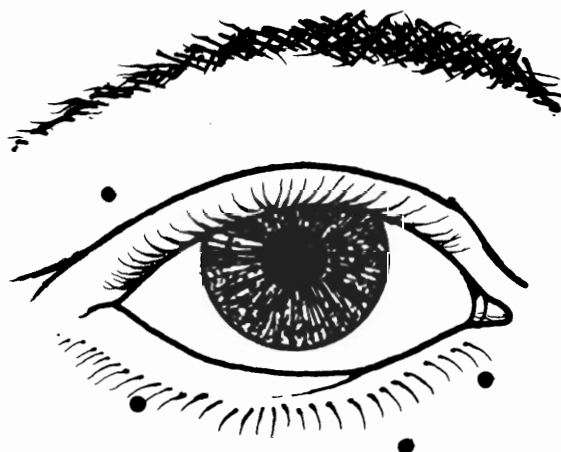
NOTE: Inverted position = -1g; standing erect = +1g.

- Q. Is a rise in blood pressure to 157/93, for example, unusual?
- A. Herbert A. deVries, PhD, an authority on physiology of exercise and former director of the Physiology of Exercise Research Lab at the University of Southern California Andrus Gerontology Center, director of the Mobile Electromyography Lab, and author of more than 60 scientific papers and several widely used texts, says, "People in exercise physiology see blood pressures such as 157/93 reported by the Klatz group during inversion (See Fig. 1) in every workout and every exercise testing session, even at a lower workload. There is certainly no problem for the normal individual as a result of inversion with respect to arterial blood pressure. Further, every cardiologist sees this level of arterial pressure when working with heart patients on treadmill stress tests."

CAUTION

INVERSION IS CONTRAINDICATED IN PATIENTS
WITH UNCONTROLLED HYPERTENSION

- Q. Is it possible to develop red spots (periorbital petechia) or discolorations around the eyes and on the forehead during inversion?
- A. During the last 14 years, thousands of patients were treated at Dr. Martin's clinic without incidents of "red spots" around the skin of the eyes. Two patients reported these spots, which disappeared before the clinical staff could observe them. The patients continued inversion despite the "red spots" and they disappeared without recurrence.
- Dr. Rothman, principal investigator of clinical studies on inversion using the Gravity Guiding System® at Kaiser, observed a patient with "red spots" for the first time in 4 years. The patient did not discontinue inversion when the spots first appeared and reappeared during the first several months. After several months observation, the spots disappeared without recurrence. The spots were diagnosed as a "venous abnormality." Apparently, the body adapts to conditioning over time. (See Fig. 3)
- Q. Does this system improve the circulation?
- A. We believe the Gravity Guiding System helps the circulatory system (venous, lymphatic, and cerebrospinal fluid) by changing the dynamics. Further studies are needed.



- Rare
- Venous Abnormality
- Requires $2\frac{1}{2}$ –3 x Gravity

FIGURE 3 – INVERSION PETECHIA NOT A MEDICAL RISK – In rare cases, "peri-orbital petechiae" or red spots on the skin around the eyes or face have been reported. In each reported case, the individual was on an anticoagulant(6) or sulfonamides(2). This is a venous abnormality involving pooling of blood caused by ruptured capillaries. Hence, it may also occur in individuals with fragile capillaries.

J. Patrick Meehan, MD, PhD, director of the Human Centrifuge Lab at the University of Southern California School of Medicine and an authority on gravity's effect on the cardiovascular system, says, "Inversion petechiae only occurs at $2\frac{1}{2}$ -3g in the experiments at the lab. They have no deleterious effects and disappear in a couple of days."

NOTE: Inverted position = -1g; standing erect = +1g.

Q. What is your clinical experience with cardiac patients?

A. There has been no evidence of cardiac difficulties or significant changes in heart function in Dr. Martin's patients who have had triple-bypass surgery, myocardial infarcts, or pacemaker implants. These patients report that inversion techniques relax them. Other physicians have observed positive results in similar cases.

Q. Are there any contraindications?

A. To be on the safe side, we believe the contraindications should include:

- History of uncompensated congestive heart failure
- Severe vascular disease
- History of space-occupying brain lesions
- Uncontrolled arterial hypertension
- Detached retina
- Severe myopia with tendency for retinal tears
- Glaucoma
- Carotid artery stenosis
- Vulnerable areas of stress from recent surgery
- Fear of inversion
- Hiatus hernia (large)
- Ventral hernia
- Extreme obesity (The extra weight load might cause ankle pain and the extremely obese might have difficulty dismounting.)
- Osteopathia, e.g., cancer and tuberculosis of the bone.

CAUTION

PATIENTS SHOULD SEEK QUALIFIED MEDICAL ADVICE BEFORE
ENGAGING IN ANY EXERCISE PROGRAM, INVERSION OR
OTHERWISE, ESPECIALLY IF THERE IS ANY DOUBT ABOUT A
NEUROLOGICAL, PULMONARY, CARDIOVASCULAR, OR
OPHTHALMIC DISORDER.

Q. What are the medical advantages?

A. We believe postural therapy using the Gravity Guiding System®:

- Relieves pain and muscle spasms in common back problems.
- Provides maximum amount of traction in minimum time.
- Enables patients to participate 100% in the treatment program.
- Provides rhythmic, soothing oscillation to relax muscles, thereby giving patients a sense of well-being.
- Improves circulation.
- Decompresses or unloads the intervertebral discs by painless vertical suspension.
- Provides maximum mobility of the spine without strain to the spinal cord.
- Stretches the paraspinal and vertebral muscles and ligaments.
- Strengthens ligaments and soft tissues.
- May be used safely with other adjunct therapy.
- Provides free inverted suspension, enabling full range of motion for maximum restoration of function of joints.
- Enables patients to exercise at their own pace and manage and control their back pain.
- Most importantly, the Gravity Guiding System has prevented surgery for many patients, restoring mobility once thought impossible without surgery.

BEFORE RESORTING TO SURGERY, MANY DOCTORS RECOMMEND INVERSION THERAPY,
USING THE GRAVITY GUIDING SYSTEM.

Q. What are some other applications?

A. They are:

- Could prevent back surgery
- May prevent and relieve varicose veins
- May improve lumbar curvature in scoliosis
- May relieve tight fascia in children with cerebral palsy
- May improve posture
- General conditioning
- Ideal for group therapy.

Q. Can persons of all ages hang?

A. Age is no factor. Clinical experience indicates that both men and women could engage in inversion exercises without medical incidence when contraindications are ruled out first. Dr. Martin has treated patients in their late 80's, with no adverse effects. Literature supports this(7). Since the system is not a toy, children must be properly supervised.

Q. Could just hanging upside down relieve back pain?

A. Yes, but you must keep mobile while inverted and not just hang passively to achieve maximum benefit from inversion therapy and to prevent muscle spasms, especially for the unconditioned beginner.

Further, the Martin Postural Therapy Program is multi-faceted; it includes DMCP floor exercises and an extensive range of exercises on the bar and oscillating bed, including sit-ups, squats, arching, and back extensions.

Q. Why should one mobilize while brachiating (hanging from the arms or legs)?

A. Mobilization is one of the means for breaking the postural monotony and lessening the postural deficit. Exercising upside down, swinging, performing squats and sit-ups, etc., facilitates postural exchange. And swinging while hanging increases the dynamic action of inversion therapy.

CAUTION

NEVER SWING BEYOND 45° WHILE HANGING UPSIDE DOWN WITH INVERSION BOOTS™; IF YOU SWING TOO VIGOROUSLY CLOSE TO 90° OR IN ALIGNMENT WITH THE BAR, YOU RISK BEING DISENGAGED FROM THE BAR.

Q. What are the advantages of hooks in front of the Inversion Boots rather than in the back?

A. Balance. The center of gravity is down the front of the ankles and not behind. Also, it is easier for anyone assisting to secure the hooks in front of the boots rather than from behind. It is natural for the foot to flex forward; therefore, each hook must be in alignment with the flexion of the foot.

Q. How do patients react?

A. Patients' response has been phenomenal to Dr. Martin's postural exercises. His program gives patients a chance to participate 100% as in no other treatment modality. It promotes self-help. At Dr. Martin's Musculo-Skeletal Clinic in Pasadena, California, Dr. Martin, even at age 74, and his staff do everything the patients do, including floor exercises, and inverted exercises. What other kind of therapy is there with such doctor-patient rapport?

Dr. Martin's patients are so well-motivated that they learn to work through their disabilities and encourage each other. Such camaraderie has a synergistic effect in rehabilitation, enhancing group therapy.

Q. Will the Gravity Guiding System® benefit patients with scoliosis?

A. There is increasing clinical evidence that inversion therapy benefits patients with scoliosis. No matter what the etiology is for scoliosis, whether hereditary or acquired, gravity is the force causing compression during the limited postures, sitting and standing, that compels the development, degree, and direction of the deformity. The only logical force that can prevent, alter, lessen, or stabilize the pattern of consequence (scoliosis) is to reverse the impact (postural exchange) of the spine by diligent elongation (decompression of the spine). At the Centre for Rehabilitation, Konstancin, Poland, gravitational traction has been used to prepare patients with severe scoliosis for surgery for many years. There has been documentation that the lumbar curvature in scoliosis is elongated during inversion traction(8).

Studies are now being conducted to test the efficacy of inversion over time in the treatment of scoliosis.

Q. Is inversion traction beneficial to patients with herniated discs?

A. There is increasing evidence that inversion therapy has eliminated the necessity for recommended surgeries.

Q. Is the Gravity Guider® apparatus used in homes for brain-injured children?

A. Yes. Several homes in the United States and Canada are using the system as part of therapy for functional neurological development. The Gravity Guider is also used as a diagnostic tool, to test severity of neurological deficit.

Q. What are the applications for brain-injured children?

A. The Gravity Guider, under careful supervision, is used to (1) improve and develop posture, (2) improve the curve in scoliosis, (3) enhance rhythm, especially for children with autism and cerebral palsy, (4) improve circulation, (5) relieve tight fascia, and (6) increase range of motion.

Q. Have any positive results been reported in brain-injured children?

A. Yes. Sensorimotor developmentalist Richard H. Harrison of the Developmental Disabilities Evaluation Services, Westerville, Ohio, who has recommended and used the system for 9 years, says, "We fight tight muscles in the rigid cerebral palsy child and we use this to help relieve tight fascia. Where muscle compaction is severe, it is difficult to allow proper neurotransmitter activity. The Gravity Guider® has been a big help in this area as well. We were cautious at first using the Gravity Guider with persons with a neurological deficit of 20% to 30% from various causes, but the absence of problems has been a pleasant surprise. We use the inverted position up to 30 minutes per day (5 sessions of 6 minutes each) and it really works out fine. For some, three 10-minute sessions are in their program. We see increased circulation, better posture, and other nice results. One nice change is in the area of vision. Ultimately, strong and complete neurological development is the basis of good visual perception. As more defined sensorimotor pathways are created, problems with convergence, fusion, and nystagmus may be corrected."

Q. Are there any visual advantages?

A. Remarkable ocular phenomena have been observed in neurologically handicapped or brain-injured children. Dr. Peter Springall, a sensorimotor developmentalist and executive director of the San Diego Academy for Neurological Development, observed that eyes of brain-injured children with strabismus would straighten out when they were hung upside down. At the Help for Brain Injured Children, Inc., in La Habra, California, the eyes of a child with severe nystagmus were observed to track evenly when his head was upside down. There have been other similar observations.

Since these are anecdotal observations, further investigation is being made to ascertain whether inverse traction over time will improve or correct these ocular conditions and whether there is a direct correlation between inverse traction and possible correction of these ocular conditions.

Q. Does the inversion posture help postural drainage?

A. Lung specialists are looking into this possibility. We have not had any experience in our clinic. Independent clinical studies are being conducted at Ohio State University Medical School in the use of the Gravity Guiding System in the treatment of severe lung diseases.

- Q. Does inversion therapy improve hair growth?
A. Dr. Martin and his clinical staff are not making such a claim. Unfortunately, the lay press has published some of these claims.
-

NOTE

DR. MARTIN'S PRACTICE IS LIMITED ONLY TO THE TREATMENT OF NEURO-MUSCULOSKELETAL DISORDERS. HE AND HIS CLINICAL STAFF EMPHATICALLY MAKE NO CLAIM THAT THE GRAVITY GUIDING SYSTEM® IS A PANACEA.

- Q. What prompted Dr. Martin to develop the system?
A. In retrospect, Dr. Martin says, "The many surgical failures I've seen prompted me to conceive of the Gravity Guiding System, fulfilling the adage 'necessity is the mother of invention.'" As a former gymnast, it was natural to develop the Decompression, Mobilization, and Conditioning exercises.
- Q. What does the Gravity Guiding System equipment consist of?
A. The system consists of the (1) horizontal bar, (2) parallel bar, (3) assist mechanism, (4) oscillation bed, (5) toggle bar, (6) balance leg press, and (7) Inversion Boots™. A handstand trainer, not yet manufactured for marketing, is included.
- Q. What other countries are using the Gravity Guiding System or Inversion Boots?
A. To name a few, Germany, Sweden, Norway, France, Austria, Australia, Italy, New Zealand, Korea, Japan, Puerto Rico, Fiji Islands, Canada, Czechoslovakia, Taiwan, and the Philippine Islands.

YOUR PATIENTS MAY ASK . . .

- Q. How long should I wait after eating to hang upside down?
A. It is wise to wait at least an hour and a half or even two hours after a heavy meal.
- Q. Is it good to hang during my menstrual period?
A. You won't believe it, but some women have reported that hanging upside down relieves menstrual cramps! Studies are being conducted to test whether this really works throughout the population under controlled conditions.
- Q. Is it good to hang while pregnant?
A. Since there is insufficient evidence about effects of inversion during pregnancy, for the present, we do not recommend that the Gravity Guiding System® be used by pregnant women.
- Q. Can I hang upside down if I have problems with blood clotting?
A. Consult your physician, as some individuals may have a tendency to bruise around the ankles from the hold of the Inversion Boots™ or some may bruise around the face, neck, and shoulder areas from fragile capillaries.
- Q. How many times a day should I hang upside down?
A. As many times as you are comfortable. Some people hang twice a day for a few minutes each time. Many others do it before and, more importantly, after exercise.
- Q. Will the sensation of blood "rushing to my head" hurt me?
A. No. This is a subjective reaction in some people. Blood does not "rush" to your head while inverted as it does not "rush" to your feet while standing. The sensation of a sudden "rush of blood" to your head or cranial congestion usually clears rapidly upon returning to the erect position(2). There may even be a tingling sensation in the feet, but inversion over time enables your body to adapt.
- Q. Can hanging break the blood vessels in my eyes?
A. No. Your patients may be reading about the rare cases of "periorbital petechiae," which may appear on the skin around the eyes and are of no significance. They usually disappear in a couple of days.
- Q. How long should I hang upside down?
A. There is no set time. It depends upon your tolerance. It is best to start inversion for a few counts, then gradually increase the counts as your tolerance for this form of stress/exercise increases. Some people hang up to 30 minutes. Remember to keep moving.

- Q. What happens to my spine while I am hanging upside down?
A. During the inverted state, your spinal column apparently elongates. The intervertebral discs and the general joint spaces are decompressed. An independent study will soon be in progress to measure the changes in the lumbar vertebrae during inversion by roentgenograms.
- Q. Why do some people feel nauseous after hanging?
A. The nausea is usually because of the inner ears' inability to adapt immediately to the change of position, but given time, your ears should adapt to inversion. If you have an inner ear problem, consult your physician. The nausea, and sometimes dizziness, is usually transient.
- Q. How can hanging upside down help a runner's knees?
A. By increasing the joint space and allowing increased mobility of the joints. Exercising with weight off the joints is a physiological need.
- Q. Will it hurt my ankle joints to separate them by hanging?
A. It should not. Always flex your feet at right angles while hanging, as this will control the pull on the ankles and any strain on the ankle joint.
- Q. Are my ankles supposed to hurt when I wear the Inversion Boots™?
A. No. You probably have not adequately filled the boots with additional foam rubber. Some people feel more comfortable wearing heavy socks. The boots should not migrate up your legs.
- Q. Why should I exercise while hanging in the inverted position?
A. Dr. Martin says that exercising while hanging upside down increases body flexibility and overall well-being, and increases the dynamics of the inversion effect. He also says that inverted sit-ups and squats are better for the joints and muscles because the joints are unloaded or non-weight bearing.
- Q. Will my insurance company reimburse me if I buy a Gravity Guider® or Inversion Boots?
A. Insurance companies usually reimburse patients provided the physician writes a prescription noting necessity for home treatment for recovery on an ongoing maintenance basis. Your dealer will be happy to help you with insurance claims.

- Q. Is Dr. Martin planning to conduct regular seminars on his postural therapy?
- A. Yes. Dr. Martin and his staff are planning to conduct regular seminars for physicians and other health professionals, to share his techniques, to exchange clinical experiences, and to have scientific dialogues to benefit patients everywhere.
- Q. Where is Dr. Martin's Musculo-Skeletal Clinic?
- A. 181 North Hudson Street
Pasadena, California, 91101
213/795-9524
- Q. Is there a toll-free number to call for medical information?
- A. Yes. Please call 800/421-0445, 800/556-1900 or 800/556-1200.

In summary . . .

- The Gravity Guiding System® has worked for thousands of patients without medical incidents in our clinic and in other clinical settings and hospitals.
- Dr. Martin developed the Gravity Guiding System originally to help his own patients recover faster. By popular demand, the products were manufactured for marketing so back sufferers throughout the world could benefit as Dr. Martin's patients have across the years.
- Gravity Guidance, Inc., makes no outlandish claims.
- Gravity Guidance, Inc., operates within established medical boundaries.
- The Gravity Guiding System provides certain known benefits. Exciting research studies are in progress at various institutions throughout the nation, to document the safety and efficacy of the Gravity Guiding System in the treatment of neuro-musculoskeletal and other disorders. Studies include, for example, therapeutic, cardiovascular, and neuro-physiological responses to inversion therapy. Reports are forthcoming.
- The Gravity Guiding System is backed by a professional, scientific, and medical team of international reputation.

REFERENCES

- (1) Klatz, R.M., Goldman, R.M., Pinchuk, B.G., Nelson, K.E., Tarr, R.S. The effects of gravity inversion procedures on systemic blood pressure, intraocular pressure, and central retinal arterial pressure. *J Am Osteo Assoc* July 1983;82(11):111-115.
- (2) Wilkins, R.W., Bradley, S.E., Friedland, C.K. The Acute Circulatory Effects of the Head-Down Position (Negative G) in Normal Man, With a Note on Some Measures Designed to Relieve Cranial Congestion in this Position. *J Clin Invest* 1950;29:940-949.
- (3) Henry, J.P. The Physiology of Negative Acceleration-1950. Air Material Command, Wright-Patterson Air Force Base Report TR 5953.
- (4) Hamilton, W.F., Woodbury, R.A. and Harper, Jr., H.T. Arterial, Cerebrospinal and Venous Pressures in Man During Cough and Strain. *Am J Physiology* 1944;141(42):42-50.
- (5) Mozes, E.B. High Blood Pressure. Philadelphia: J.B. Lippincott, Co., 1959:68.
- (6) Plocher, D. Letter to the Editor. *N Engl J Med* November 25, 1982;307(22):1406.
- (7) Sheffield, F.J. Adaptation of Tilt Table for Lumbar Traction. *Arch Phys Med Rehab* 1964;45:469-472.
- (8) Majoch, S. Gravitational Traction in Preparation for Surgery. *Physiotherapy*, March 1981; 67(3):72-73.

SUGGESTED READINGS

Cailliet, R. Low Back Pain Syndrome. 5th ed. Philadelphia: F.A. Davis Co., 1981.

Cyriax, J. Textbook of Orthopaedic Medicine: Diagnosis of Soft Tissue Lesions. 7th ed. London: Baillere-Tindall 1978;1.

Goligoski, Bob. Back pain is put on the rack. *San Jose News* 1983 June 7:1E,4E.

A clinical manual by Robert M. Martin, II, MD, is forthcoming.
--