

Body Imbalance: Need for the Pelvic Rotation Maintenance System

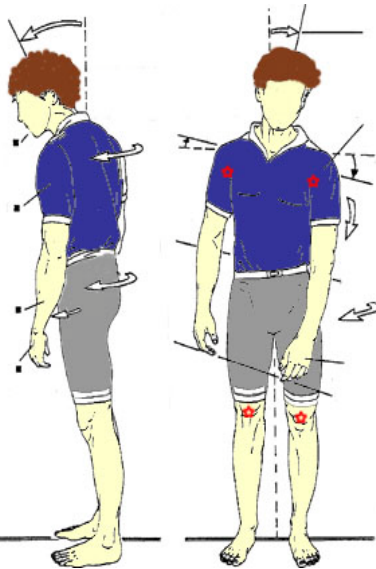
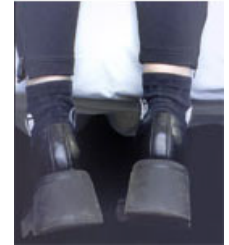
Almost every individual has some degree of imbalance in the neuromusculoskeletal (muscles, bones, joints and ligaments) system caused by daily habits, injury, or genetic structural tendencies. This imbalance forms a pattern of hip or pelvic rotational imbalance in which one hip rotates backward pulling the leg on this side upward (or “short”) while the other hip rotates forward pushing this leg downward (or “long”).

LATERAL
HIP
ROTATION
and/or HIP
ELEVATION



Physical examination showing “SHORT” right leg

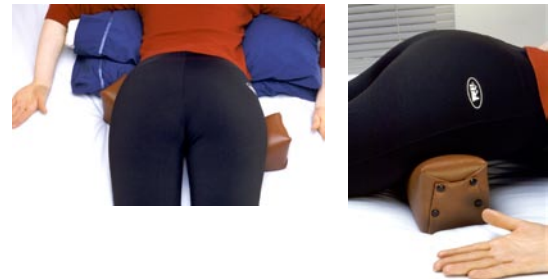
The clinical term for this leg length imbalance is **long and short functional leg length differential** (having one leg “longer” or “shorter” than the other). In the example, the person has a “short” right leg and a “long” left leg (test performed with person prone and feet hanging freely off of a bed).



This pelvic and leg length imbalance creates a chain of asymmetry in muscle balance and the position of shoulders, neck, etc. and distorts normal body motion or biomechanics (in somewhat the same manner that having the front-end of a vehicle out of alignment distorts proper operation and increases wear and tear).

Such asymmetry or imbalance often underlies back pain and other spinal, structural and soft tissue problems. **Many people present imbalance – long before feeling any related pain or other symptoms.**

The **pelvic wedges system** used in the Back Kit is designed to help correct this misalignment or imbalance by redirecting the correct pelvic, leg length and neuromuscular pattern.



A **special two density foam neck roll** is designed to improve neck alignment and muscular balance.



Used in concert with correct professional care, the Pelvic Rotation Maintenance System can lessen body imbalance-related problems in much the same manner that brushing teeth lessens the likelihood of developing cavities and augments the correct professional care provided by a dentist.

A FAILSAFE Method of Identifying and Gently Correcting Body Imbalance

The Pelvic Rotation Maintenance Protocol for correctly assessing a person's body imbalance pattern involves three (3) tests:

- leg balance
- neck balance, tenderness and/or restriction of movement, and
- para-spinal muscular balance.

i. leg balance

- check the leg balance by squaring the heels and comparing the physical distance each extends over the edge of the table;
- **slowly** raise the heels to 90 degrees - ask patient/client to describe the presence/level/**exact** location of pain, discomfort, and/or restriction of movement as heels are raised;
- confirm any point of symptomatic report/complaint, ask if this is a chronic or common area of discomfort;
- *note if short leg becomes shorter when lowered to extended position.*

ii. neck balance/areas of tenderness/restriction of movement

- evaluate structural and soft tissue balance in the neck region and the presence of tenderness on the left or right side;
- palpate to evaluate left and right restriction to floor-ward pressure in soft tissue over laminal region as well as identify specific "nodal/swollen" tender areas;
- have the patient/client acknowledge the tender area on one side of the neck compared to (generally) a lack of tenderness on the other (*note: greater tenderness will usually be reported on the more restricted side; about 80% of people will present this on their "short" leg side*); ask if the tender area in the neck is a chronic source of discomfort;
- make a gentle floor-ward pressure on the LESS restricted side of neck over laminal region; *step to foot of table and check for/confirm further "shortening" of previously "short" leg*;
- step back to head of table and pressure test the restricted side of neck; move to foot of table and check for/confirm leg length correction (*note: plan to use harder end of neck roll under "reflex zone" that improves leg balance*).

iii. para-spinal muscular balance

- evaluate the para-spinal muscle balance on left and right sides of thoracic and lumbar spinal area and note obvious differences;
- note differences in general gluteal muscle tone comparing left and right sides;
- palpate the mid-thoracic spinal areas (left and right) for tension and tenderness;
- confirm tender points - particularly if this is a primary area of complaint.

Wedge Protocol for gently re-directing correct structural balance.

- place low wedge (at 45 degree angle) under the upper thigh area of the “short” leg and high wedge (at 45 degree angle) under iliac anterior spine region of “long” leg; make sure patient/client is comfortable;
- check for improvement in the leg length balance;
- re-palpate neck tender points and note % of pain and tenderness reduction;
- check for improvement of soft tissue balance, re-palpate for improvement in tender areas;
- have patient/client tell you whether they feel 25-50-75% better **and (as applicable) comment on the immediate improvement the wedges have made in their body structure and pain level;**
- **remove wedges after about 2 minutes;**
- *(as applicable)* re-check heel raise noting the improvement in the degree and beginning point of discomfort and restriction and **(as applicable) comment on this being a very good sign of improvement and we’ll be using this system with your treatment and self care plan;**
- (as available) show patient/client their imbalance pattern on the spinal model and ask if they have any questions about what you’ve explained to them.

Protocol for maintaining the correct cervical spine contour and overall body pattern.

- have patient/client roll onto back;
- open neck roll to show “harder” (2 inch) foam piece at one end;
have patient/client pull neck roll into position by placing *softer(4 inch)* foam piece under MORE restricted side of neck and pulling until *harder* foam supports the reflex zone in the neck that corrects leg balance (as identified in Step ii. neck balance test).
- ***confirm that this positioning improves/maintains leg balance.***

Summary of My Self Care Appointment

Name: _____

(We recommend completing a summary sheet for each member of your family)

Health Goals: (what's MOST important to me?)

1. Wedge Protocol:

My _____ leg is "short"; because of synchrony my _____ leg is "long". To gently correct my leg imbalance, a wedge was positioned on my "short" (____) leg side near the top of my _____ to let the hip on this side fall forward and the wedge on my "long" (____) leg side was placed under the "point" on my _____ to push the hip on this side backward.

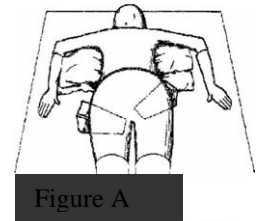


Figure A

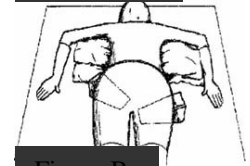


Figure B

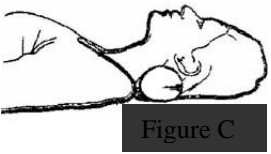


Figure C



Figure D

2. Neck Roll Protocol

The (____) side of my neck was more restricted than my (____) side. To gently reverse this, the (____) end of the neck roll was positioned against this posterior reactive side (the side where the vertebra have rotated backward) by pulling the softer end under my neck until I could feel the firmness against the "balance point" which works like a reflex and actually balances my (____).

Re-check

To achieve the best possible results and ensure I use the technique safely and correctly, my doctor and I will agree on a periodic re-check schedule based on my needs. The following timeline will help me get started properly:

Suggested First Re-Check Visit: _____ :
(within 2 weeks of self care appointment)