

The Eckard Motorized Flexion/Distracton table utilizes a system of brackets & belts/straps to assist the doctor in the treatment & correction of Scoliosis through de-rotation, decompression, and lateral flexion of the spine.

The ultimate goal of flexion distraction for the scoliosis patient is:

- Induce motion into the spine to aid in disc rehabilitation
- Create a “mirror image” of the patient’s posture to stretch the compressed soft tissues along the concavity and relax the elongated along the convexity
- Utilize the lateral traction straps & lateral flexion feature to create a fulcrum at the apex of the scoliotic curvature, and apply additional lateral traction forces above and below the fulcrum point to induce lateral deviation in the patient’s spine in the *opposite* direction (the goal is to go *beyond* a simple straightening of the spine).
- The split pelvic & thoracic drop pieces are used to induce a three-dimensional de-rotation into the spine through the hips and the ribs (alternatively, foam wedges may be used for this purpose in a table without split drop pieces)

A. Patient Placement:

The abdominal piece is not lowered.

The belts should be laid out before the patient is placed on the table. The fulcrum belts should contact the spine at the apex of the curvatures, so position them accordingly. The stabilization belts will be positioned above and below the lateral curvatures, at transition points (where the spine comes back to the midline).

The split pelvic drop piece will be increased to maximum tension, and raised on the side of the anterior hip (typically on the right). The split thoracic drop piece will be raised on the opposite side (usually on the left), again with the tension set at maximum. The purpose of this is to facilitate de-rotation of the spine. To further enhance the effectiveness of the table in achieving this goal, you may place also a 20-30# weight over the posterior rib arch after the straps are in place.

Female patients may be more comfortable if a 2" soft foam cushion is placed under the breast area in a manner that will prevent compression of this area.

The patient will lie prone on the table. The patient should grasp the T-bar on the side of the low shoulder (typically, this will be the left arm), and the cervical section will be angled up slightly to maintain the cervical lordosis. The patient will turn their head away from their CD angle. Additionally: the patient can be secured for greater distractive force by utilizing the sacral belt &/or ankle straps. At times the practitioner may chose to only use one ankle belt/strap applied to the ankle away (opposite) from the lateral deviation for unilateral distractive force. The lateral traction straps will be tightened to the limit of patient tolerance, *before* the table is laterally flexed to the side.

The patient should be laterally flexed **towards** the convexity of the primary curve. The legs will be laterally flexed in the **same** direction. You may need to position the patient higher up or farther down on the Eckard table depending upon where the apex of the curve is (the fulcrum of the lateral flexion should be positioned at the apex of the curve). If the patient has a double curve of roughly equal severity, you may want to flex the patient in one direction with the fulcrum at the thoracic apex, then slide them down and laterally flex the table in the other direction, this time with the fulcrum at the lumbar apex, for about 10 minutes in each direction.

The LD Cobb angle will usually take precedence due to the 3:1 disc ratio. In a patient with good lumbar lordosis & lumbar disc spacing, the doctor may experience more favorable results by focusing upon reducing the lumbar curve first. In this case, flex for the Thoracic Cobb angle every 3rd visit.

B. Treatment consists of:

1. Continuous flexion/distraction to enhance spinal ROM's and promote the process of osmosis & imbibition to rehabilitate the IVD's
2. Decrease muscle guarding/spasm on the convexity of the curvature (Core Muscle Stimulator at the fast speed)
3. Decrease ligamentous fixation on the concavity of the curvature (Core Muscle Stimulator at the slow speed)
4. Mobilization work during table movement (e.g., the practitioner would use the inferior hand to stabilize the sacral base; the superior hand would be on the upper limit of the scoliotic curve; then, slowly work down to contact each vertebra, distracting each intervertebral space, and putting the facets through a normal ROM)

The purpose of the treatment is to force the spine into a mirror image of the typical scoliotic presentation (e.g., change a right thoracic/left lumbar to a left thoracic/right lumbar, while the patient is in the table).

The flexion/distraction speed should be set at the disc rehabilitation setting.

C. Treatment frequency and duration:

- Intensive treatment should begin with daily visits (preferably twice daily)
- A re-evaluation must be performed every 12 visits
- If improvement is evident, reduce treatment frequency to 3 visits/week for the first month, 2 visits/week for the second month, 1 visit/week for the third month, then PRN
- Core Muscle Stimulation is done at the fast speed for a *maximum* of 2 minutes (1 minute per spinal region)
- Core Muscle Stimulation is done at the slow speed for a *minimum* of 2 minutes (1 minute per spinal region)
- After Core Muscle Stimulation, the patient will be flexed/distorted on the table for 15-20 minutes prior to the adjustments (FIX phase)

If objective outcome assessments measure a decrease in Cobb's angle, treatment may be stair-stepped down as outlined above. If the Cobb's angle is stable or worsening, the patient must be consulted and informed; at this point, they must decide whether to continue treatment or pursue other options. If they elect to continue treatment, doing the same thing & expecting different results is the definition of insanity; consult with other CLEAR D.C.'s for advice & assistance in modifying the patient's treatment plan to achieve more optimal results.

Additional Resources:

www.scuba.com

877-728-2243

Scuba Belts & Buckles (Part Number: WB-1101) for strapping the patient's ankles

Harrison Supply

www.harrisonchirosupply.com

1-800-525-6634

Foam wedges (if the table does not have split pelvic & thoracic drops)

Additional sources for Spinal Blocks:

<http://www.bannertherapy.com/Products.aspx?pillows-cushions-rolls-chiropractic-therapy&dept=1021400>

<http://www.scrip-inc.com/category~menu~312108~cat~312108.asp>

www.bodyline.com