

DYNAMIC BRACE SYSTEM (D.B.S.)

Description of Scoliotic Conditions Appropriate for Treatment with the D.B.S., and System Directions

by Dr. Stabholz

The following is an overview of the scoliotic cases appropriate for treatment, and directions for using the system.

The D.B.S. is being used for the treatment of idiopathic juvenile, adolescent and adult scoliosis. Spinal curvature should not be diagnosed as scoliosis unless the curvature exceeds 10. Only curves greater than 10, with structural changes including rotation, should be diagnosed as idiopathic scoliosis.

The curve progression should be considered only with a minimum increase of 5 on two sequential roentgenograms.

Initially, the use of the D.B.S. is the same as with the Vertetrac (see instructions for Vertetrac's use).

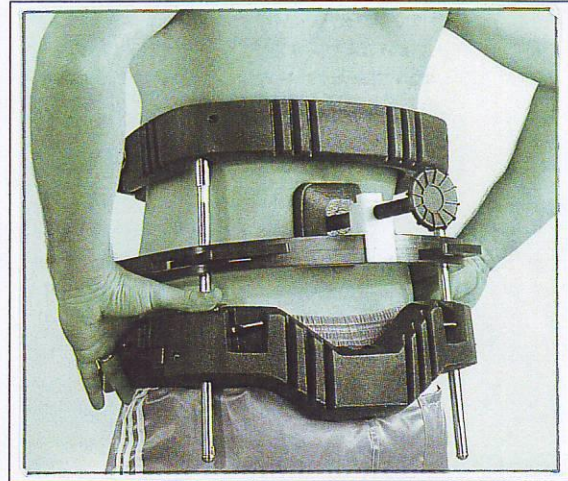
We apply the D.B.S. treatment in cases with curvatures of less than 20 only when the patient suffers from continued low-back pain. The treatment is recommended for 30 minutes once a day until the elimination of pain (about 15 to 20 treatments). The control x-ray roentgenogram should be taken after six months.

When the progress of scoliosis is found (curve greater than 20), daily treatments of 30 minutes with the D.B.S. should be administered until the maturity of the child is reached. The traction power of 10-20 kg. applied from each side should be determined individually and according to the age and constitution of each patient.

We recommend the treatment with the D.B.S. in cases with the curvature between 20 and 30 who have no pain or other complaints but have a tendency to progression. We apply the treatment of 30 minutes 2-3 times daily until the maturity is reached, and the patients remain under the control for 2-3 years.

In patients with curvatures of 30-40 and more, the treatment with the D.B.S. is started immediately for 30 minutes 3 times per day. Once maturity has been reached, 1-2 half-hour daily treatments should be continued for a period of six months.

Roentgenograms should be taken every three months, and discovery of scoliosis progression greater than 5 requires resumption of 3 daily treatments for 30 minutes until the stability of the spinal x-ray has been finally reached (x-ray control).



FOR ACHIEVING OPTIMAL RESULTS, THE STRICT OBSERVATION OF THE FOLLOWING INDICATIONS IS ABSOLUTELY NECESSARY:

1. One of the most important functions of the D.B.S. is the applying of distraction force. This must be done exactly as explained in the Vertetrac instruction manual.

2. In C-scolioses, the applied distraction force should differential - much higher from the concave side. The spine should be straight during treatment. Pressure by the scoliotic rail pad should be applied on the convex side (on the apical vertebra). The force of pressure should be adapted to the endurance of the patient.

3. In S-scolioses (also double compound), the applied distraction force should be as strong as possible, but must be the same on both sides. Pressure by the scoliotic rail pad should be applied on the convex side, or on the hump when it exists.

In more complicated cases, when there is a doubt if the D.B.S. is properly applied, an x-ray should be taken (only during the first treatment). The improvement of the existing condition should be 60-80%.

4. In cases when apical vertebra is at T-9 or below, the upper frame should reach the angulus of scapulae.

5. In cases with apical vertebra above T-9, the upper frame should reach the axillar fossa during traction (it is approximately at Th-4). In some cases the cervical traction should also be applied.