

A New Twist For A Twister— The Torsion Splint

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For the baby just starting to walk or too small for the conventional Torsion Brace, I recently tried what I thought to be a novel idea.

A double bar short leg brace was prescribed for a child 15 months old, to stabilize and control the ankle. However, the child walked with his foot toed inward, so the Doctor suggested adding a "twister." From my past experience, the cable type twister tends to either twist around itself or coil when a thin gauge is used. If a heavier gauge cable is used, it then becomes rather cumbersome for the length required and does not lend itself freely to anatomical movement of the knee and hip joints. To overcome this, a hip joint is generally used and in the case of a small child, where the distance from the top of the brace to the knee is so short, a knee joint also would probably have to be used.

After consulting with the prescribing Orthopaedic surgeon, I decided to try using a chain, of the type used on an "electric shopper car," as it lends itself to all movement, without concern of alignment, yet does not twist when anchored.

The chain was then encased in rubber tubing after lubricating it with soap suds so the tubing would slide on easily.

A leather cuff was attached just above the knee to hold the chain laterally. A metal pelvic band, which must be long enough to almost encircle the pelvis for good anchorage and unilateral control, was attached to the upper end.

Next, a one-quarter inch rod was brazed onto the distal end of the chain, which in turn was inserted into a split sleeve grip and attached with screws to the upper lateral bar of the brace. I found the split sleeve grip was better than the set screw method for stabilization and angle adjustment.

This all worked very satisfactorily and has the merit of being lightweight and not bulky and readily lending itself to the active movements of the child's leg.

