What is SEMLS?

SEMLS is a procedure on lower extremities like the hips, knees, ankles or feet. It’s called “single-event multilevel surgery” because multiple corrections for existing soft tissue and bone problems are done in one orthopedic surgery. SEMLS usually results in fewer surgeries overall and just one phase of rehabilitation.

SEMLS can be part of a treatment plan for conditions like cerebral palsy and spina bifida. For cerebral palsy, SEMLS is ideally performed after treatments to reduce muscle tone so that deformities don’t recur if your child has a growth spurt.

SEMLS might help your child to:

- Improve or preserve walking abilities.
- Enhance mobility skills.
- Decrease consumption of oxygen, which will help them tire less easily.
- Preserve joint mobility.
- Reduce risk of issues associated with misaligned muscles and bones.
- Reduce risk of pain as they grow older.

Who Benefits From SEMLS?

Neurologic conditions that affect the brain or spinal cord can make walking difficult. Left untreated, these conditions can cause painful, arthritic joints. If your child has cerebral palsy or spina bifida, a gait and motion analysis can help determine if SEMLS makes sense as part of a comprehensive treatment plan.

If your child has undergone a selective dorsal rhizotomy (SDR) for cerebral palsy, SEMLS can help correct bone or joint deformities, allowing for more balanced muscle and joint function.
See how SEMLS can be a part of orthopedic care at Gillette Children’s Specialty Healthcare for kids who have cerebral palsy.

At Gillette, your child’s growth, challenges and expected outcomes will be assessed by specialists who are trained to work with kids. Once your child is identified as a good candidate for surgery, we’ll work with your family to plan a time for surgery and rehabilitation that will work with your schedule.

Gillette is a leader in providing pediatric orthopedic SEMLS. During a single SEMLS intervention, we can correct multiple bone and soft tissue problems using the expertise of a highly skilled pediatric orthopedic surgery team.

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