

# The Growing Spine

## What's ahead for my young child with scoliosis?



Orthopedics Department

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[www.bcchildrens.ca/spineprogram](http://www.bcchildrens.ca/spineprogram)

### Early Onset Scoliosis

Your child has been referred to our orthopedic surgeon because of a curved spine called scoliosis that started early (before age 10). There are a few different types.

#### 1. Idiopathic Scoliosis

Idiopathic scoliosis is when the spine is curved and the cause is not known

#### 2. Congenital (Born with) Scoliosis

Congenital Scoliosis is a curved spine caused by spinal bones (vertebrae) that are not formed the correct way before your baby is born.

#### 3. Syndromic Scoliosis

Syndromic scoliosis is related to some underlying condition or syndrome that your child has.

### Check-Ups

As your child keeps on growing, they will have many check-ups with your orthopedic doctor to check the progress of the spine curve.

At each check-up, you can expect:

- Your child to have x-rays and/or a physical exam
- Your surgeon to talk about a course of bracing or
- Your surgeon to talk to you about a temporary growth-friendly surgery to attach rods which will help your child's spine grow

Your surgeon will talk about a more in-depth surgery that may be needed in the future to attach rods to your child's spine permanently.

Your surgeon may do other tests:

**A CT scan** ( a type of x-ray) which shows a 3D image of the spine. This gives the surgeon more information if surgery is needed.



**A MRI (medical imaging test)** which uses a strong magnet that gives detailed 3D images of soft tissues) which would show the spinal canal and rule out any problems.

### Growth Friendly Surgery

There are a few temporary surgery choices that may be right for your child.

Each choice will need frequent visits to your surgeon either for a check-up or for a "lengthening" up to 3 to 4 times a year after the surgery for the growing rods.

### Growing Rods



Growing rods include a surgery to attach hooks, screws and expandable rods to your child's spine. Your surgeon will talk with you about which type of growing rod would best for your child's curve. There are 2 types of growing rods used:

1. The most often used growing rods need to be lengthened around every 6 months. When the rods are lengthened, your child will have a general anesthetic and small cuts with stitches and may need a follow up visit to remove the stitches.
2. There is a newer type of Magec growing rods which are lengthened using a magnet outside your child's body. Magec growing rods are lengthened without the need for a general anesthetic, cuts or stitches.

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3. VEPTR (Vertical Expandable Prosthetic Titanium Rib)  
A VEPTR is a system of hooks and rods that can be attached to your child's ribs, pelvis, or spine to treat rib and spine deformities.



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- The VEPTR also needs to be lengthened around every 6 months. When the rods are lengthened, your child will have a general anesthetic and small cuts with stitches and may need a follow up visit to remove the stitches.

## Activity Changes

After your child has a Growing Rod or VEPTR surgery or lengthening, it is important to change their activity level.

### First 60 Days after Surgery

Quiet activity only: walking,  
Your child may take part in play where there is a low risk of falling or being bumped, NOT 'rough-housing' or contact sports.

### 2 to 3 Months after Surgery

At the 2 month follow up visit, your surgeon will guide you as to what activity is allowed. This may include gentle swimming.

### 3 to 6 Months

Your child may gradually return to activity including PE as long as the activity is NON-CONTACT and LOW RISK. This includes gentle swimming, jogging, running and cycling.

### 6 Months until 1 Year after Permanent Surgery

Your child must continue to avoid competitive and contact sports while having growing rods and/or VEPTR until 1 year after permanent surgery.

No slides, water slides, or trampolines.

**Follow your surgeon's advice for returning to activity. If you are not sure which types of activities are okay for your child, contact the Orthopaedic Department at BC Children's Hospital as listed below.**

## The Spine Team

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**For more information on scoliosis and the growing spine, visit:**

- BC Children's Hospital  
[www.bcchildrens.ca/spineprogram](http://www.bcchildrens.ca/spineprogram)
- Growing Spine Foundation  
[www.growingspine.org](http://www.growingspine.org)
- Scoliosis Research Society  
[www.srs.org](http://www.srs.org)