What is a spinal fusion?
A spinal fusion is an operation that joins or fuses some of the bones of the spine. These backbones are called vertebrae. It is often done to treat scoliosis, also called curvature of the spine.
- Fusing the bones helps to prevent the curve from getting worse.
- It may not completely correct the curve.

How is a spinal fusion done?
In general, there are 3 ways that spinal fusions are done. The time it takes you to recover depends on:
- Your general health and overall medical condition.
- The amount of curve in your back.
- The type of spinal curve you have and how flexible the curve is.

The 3 methods used to do a fusion include:
- Anterior – done on the front part of the spine through an incision in your side
- Posterior – done on the back of the spine through an incision in the back of the body
- Anterior-Posterior – done on the front and back part of the spine through 2 incisions

All 3 methods use pieces of bone to fuse the backbones together. This is called a bone graft. The graft:
- Grows into the spaces between the backbones to fuse them together.
- Helps to maintain the position of the bones and hold them straight.

The bone graft can come from either:
- A piece of bone from your own hip area. This is called an autograft.
  - You will have another incision over your hip area.
  - It should not affect your ability to walk or run.
- A bone bank from someone who has donated bone – this is called an allograft.

Often, a metal rod or rods are also used to help hold the bones in place. The rods help hold everything in place until the bones grow together.
What do I need to do before the surgery?

Follow your doctor’s advice to help get ready for surgery. You may need:
- A pre-operative (pre-op) visit to meet with the anesthesia team who will give you medicine to put you to sleep during surgery. This medicine puts you into a very deep sleep, so you do not see, hear or feel anything.
- Blood and urine tests
- X-rays

Several weeks before surgery:
- Eat foods with lots of iron and protein for several weeks before surgery. This would include foods like meats, nuts, eggs and green, leafy vegetables.

1 to 2 days before surgery:
- Your doctor may suggest taking Miralax (an over-the-counter laxative) for 1 to 2 days before your surgery. This will help to prevent constipation (hard bowel movements) after surgery.
- Drink lots of fluids the day before surgery so your body is well hydrated.
- Pack your belongings. Be sure to include a robe or loose-fitting shorts and t-shirts. You may also wish to bring an MP3 player, books or DVDs.
- If you like to chew gum, pack some in your suitcase. Chewing gum after your surgery can help your bowel function return to normal more quickly.

Before you come to the hospital:
- If you have long hair, wash it and put up in a metal-free ponytail holder.
- Wash your skin with the CHG wipes as you were taught in the pre-op clinic.
- Do not wear contact lenses, makeup, jewelry or nail polish to the hospital on the day of surgery.

You can also call the Child Life department to schedule a tour of the surgical area with your child. The phone numbers are:
Egleston campus: 404-785-6726
Scottish Rite campus: 404-785-2333

What happens after the surgery?

If your doctor thinks you need to have special care overnight, you will go to the Intensive Care Unit (ICU). Otherwise, you will go to the PACU (Post-Anesthesia Care Unit or Recovery Room).

When you are ready, our staff will move you to a patient care area. You may look a little pale and have a puffy face for 1 to 2 days. This is normal and is due to the position of your body during surgery.

Care in the hospital

Monitors and checks
- You may need oxygen to help you breathe easier as you wake up. If you do, a plastic face shield will blow an oxygen mist into your face. Your oxygen level will be monitored by a machine called a pulse oximeter (or pulse ox). A wire connects the machine to a bandage on your finger.
- A machine called a cardiac monitor will check your heart rate and breathing rate. Thin wires connect the monitor to 3 electrodes on your chest. These electrodes feel like stickers and will not hurt you.
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- Our staff will check your temperature, heart rate, blood pressure and breathing rate often, even at night.
- Our staff will also check the feeling and movement of your legs and feet often, even during the night. This is to help make sure the nerves and blood vessels in your legs are working well. Be sure to tell your doctor or nurse about any changes in your legs or feet.

**IVs, drains and tubes**
- You will have 1 or 2 IVs. IV stands for intravenous (in your vein). You will get an antibiotic (a germ-killing medicine) through your IV. You will also get fluids through your IV until you can eat and drink.
  - Once you can drink well, the IV may be “capped off”.
  - The IV cap will remain in place until you do not need it anymore.
- A small, soft tube called a Foley catheter will drain urine from your bladder. It is put in place during surgery while you are sleeping. The tube is put into the same opening through which you urinate.
  - A bag connected to the tube collects urine. The bag is emptied several times a day. This helps your nurse and doctor keep track of your body fluid level.
  - The tube is usually removed the morning after your surgery. After the tube is removed, your nurse or patient care tech will help you get up to the bathroom.
- You may also have a drain in your wound called a Hemovac. It drains extra fluid from the wound into a small container. Your doctor will remove it 1 to 2 days after surgery.

**Pain medicine**
You may also get pain medicine through your IV. This can be done using a Patient Controlled Analgesia (PCA) pump. Your nurse will teach you about how to use the PCA pump as soon as you are able to use it for yourself.

If you do not have a PCA pump, your nurse can give you pain medicine through your IV. Once you are able to eat and drink after surgery, we will turn off the PCA pump. You can also take your pain medicine as a liquid or pill by mouth then.

No matter what type of pain control method you have, if you do not get enough pain relief to sleep, turn, or walk as needed, let your nurse or doctor know.

Other things you can do to help your pain include:
- Tell us what has helped you in the past.
- Breathe deeply and slowly.
- Watch videos or TV.
- Listen to music.
- Imagine you are in your favorite place.

**Moving around**
Your nurse and tech will help you change position often, even at night. **It is very important to begin moving early.** This helps keep your lungs clear and prevents soreness and skin problems. Physical therapy will begin the day after surgery.
- You can give yourself a dose of pain medicine from your PCA pump before or after turning to help decrease any pain.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.
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- When turning, keep your body and back in a straight line. Your nurse and tech will help you roll in continuous motion. This is called a log roll. As you start feeling better, you can help turn yourself.

  Log roll

- When lying on your side, place pillows between your knees and behind your back to help you feel better. You can also place a pillow under your top arm.
- When lying on your back, place pillows under your knees and arms.
- The physical therapist or nurse will help you get out of bed and sit in a chair the morning after your surgery.
  - Sit in the chair for at least an hour 2 to 3 times the day after your surgery.
  - The sooner you begin moving, the quicker you will get better. It is never easy to get up the first time after surgery, but it will help reduce the chance of problems.
  - Each day, move around more than you did the day before.
- As you progress, your physical therapist will help you stand and walk. She will also teach your family how to help you turn, stand and walk. If you have stairs at home, your physical therapist will help you practice going up and down stairs.
- Your doctor may order a special brace for you to wear after surgery. If needed, it can help keep your back from moving too much while it heals.

Blood work
Your doctor may order a blood test the morning after surgery. This helps your doctor know if your blood counts are normal.

Care of your lungs
Our staff will give you a small device called an incentive spirometer to use after surgery.
- Your nurse will teach you how to use it to do breathing exercises. This will help prevent pneumonia and other lung problems. Hugging on a pillow while you cough puts less strain on your back.
- Many patients have a slight fever after surgery. Using your incentive spirometer often can help your temperature return to normal.

Feelings
As your activity level increases and you begin feeling better, your feelings and mood will improve. Once you are able to sit in the chair and walk to the bathroom, you may feel better if you take a sponge bath, comb your hair or put on makeup.
Many times, teenage girls have irregular menstrual periods after surgery. This is very common.

**Eating and drinking**
- Right after surgery, you may only be allowed to have a small amount of ice chips or sips of clear liquids. To make sure your stomach is working well, your doctor and nurse will listen to your stomach for “gurgling” or bowel sounds. At first, they may not hear very much. This is normal.
- As your activity level increases, normal bowel sounds will return. As your bowel sounds return to normal, your doctor will increase your diet to clear fluids and then to a regular diet. This may take a few days.
- If you feel nauseated (a queasy, sick feeling), let your nurse know. She can give you medicine through your IV to help you feel better.
- Once you are able to drink clear fluids and eat small amounts of food, you can begin to take your pain medicine by mouth.
- Constipation is trouble having a bowel movement. It sometimes occurs due to the effects of the pain medicine and being less active. To help prevent this, drink plenty of fluids and begin to move around as much as you can.

**Care at home**

**Care of your incision**
If you have a bandage when you go home, your doctor will let you know how and when to change it.
- You may have Steri-strips, which are small strips of tape, over your incision. These usually fall off on their own in 1 to 2 weeks.
- Stitches are usually on the inside and do not need to be removed.

**Pain control**
You may need pain medicine during the first 1 to 2 weeks that you are at home. Your doctor will give you a prescription. You will be able to gradually stop taking it over the first week.
- Do not take any over-the-counter medicines unless told to do so by your doctor.
- Change your position often, so you do not get sore from staying in one position too long. Walking often will help your soreness go away over time.
- Concentrate on things you enjoy like TV, music, a good book or a game with your friends. This helps to take you mind off your discomfort.

**Washing your hair**
You can wash your hair as often as you like. There are several ways to do this until you are allowed to shower.
- Place a chair next to the tub, and lie across it with your head under the faucet. A small hose with an attached sprayer may be helpful to use.
- If you are small enough to lie on your kitchen counter next to the sink, you can wash your hair by holding it under the faucet or using the sprayer hose.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.
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Showering
Keep your incision clean and dry until the doctor tells you that you are allowed to shower. Be sure to pat the incision dry after your shower.
- At first, you may feel dizzy or feel faint when you shower.
  - Have someone nearby for the first few times you shower.
  - Place a waterproof chair in the shower.
  - Use lukewarm, not hot, water.
- Use a mild soap around your incision.
- Your doctor will let you know when you may take a tub bath or go swimming.

Sleep and rest
You can sleep in your own bed at home. Use pillows for support like you did in the hospital. Take rest breaks often during the day, but increase your activity and walk more each day.

Eating
Eat the right foods and drink enough fluids to help you heal and regain strength.
- Eat foods high in protein, iron and calcium, such as peanut butter, eggs, meat, cheese, milk, yogurt and green, leafy vegetables.
- Eat high-fiber foods, and drink plenty of fluids to help prevent constipation.
  - Drink six 8-ounce glasses of water a day.
  - High-fiber foods include whole-grain cereals, bread, fruits and raw vegetables.
- Sometimes eating 5 or 6 small meals a day will keep you from feeling too full after eating.

School
Your doctor will let you know when you can return to school. This is usually in 2 to 4 weeks.
- When you return to school, you may want to begin with half-day sessions for the first week.
- Schoolbooks are heavy to carry. A couple tips include:
  - Ask a friend to carry your books from class to class.
  - Keep a set of books at home and at school so you do not have to carry them back and forth.

Activity
You will not be able to attend physical education (PE) classes for 6 to 12 months. Your doctor will let you know when you can begin them again.
- Let the doctor know what sports you take part in so he can let you know when you may begin again.
- You may be able to begin some light exercise, such as swimming, in 2 to 3 months.
- Your doctor will let you know when you may drive, usually around 6 weeks. Always wear your seatbelt.
- Walk, walk and walk! This will help you get better faster. You can go up and down stairs, but use a railing to help you feel more secure.
- Do not lift anything over 10 pounds until your doctor says it is okay.
- It is often easier to sit in a firm or hard chair rather than in a low, soft chair.
- Bend at the knees and hips if you need to pick something up off the floor. Do not bend or twist at the waist.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.
When should I call the doctor?
You or your family will need to call your doctor if you have:

- A temperature of 101°F and do not also have a cold, flu or other illness.
- Increased redness, swelling, tenderness, pain or warmth at your incision sites.
- Drainage or bad odor at your incision sites.
- Open areas along the incision line.
- Pain not relieved by pain medicine.
- Numbness or tingling in your arms, legs or feet.
- Changes in bowel or bladder control.
- Any questions or concerns about how you feel.