Dega Osteotomy (Pelvic Osteotomy)

Why does my child need this surgery?

The hip joint is a ball-and-socket joint that joins the thighbone (femur) to the pelvis. The femoral head, a bony ball at the top of the femur, rotates (turns) inside the pelvic socket (acetabulum). In a child with very tight muscle tone (spasticity), the muscles around the femur can begin pulling the ball out of the socket. For children who walk, the weight of the pelvis may help hold the joint together. A child whose pelvic socket is deep and in good condition may need a femoral derotational osteotomy. This surgery repositions the ball of the femur in the pelvic socket.

Sometimes a child’s pelvic socket becomes too shallow to hold the femoral ball. They may need a Dega osteotomy and a femoral derotational osteotomy. Together, the two procedures repair the socket, reposition the ball of the femur and make the hip joint stable again. Both procedures will most likely happen during the same surgery session. They will probably be combined with a procedure to relax tight muscles around the hips. The Dega osteotomy is named for the physician who first wrote about it. It has been very successful in helping stabilize hip joints in children who have cerebral palsy.

Some children, typically very young children, may only need a procedure to relax tight muscles around the hip joint.

What happens during this surgery?

“Osteotomy” refers to cracking a bone surgically. In a Dega osteotomy, a cut is made in the pelvis above the pelvic socket. The surgeon bends part of the pelvic bone down to make the socket into more of a cup. The surgeon also does a bone graft. This will fill in the space in the pelvis. As it heals, the bone graft will become part of the child’s pelvic bone. A cast is hardly ever needed with a Dega osteotomy.

What are the incisions like?

The surgeon makes a narrow cut along the front of the pelvis, in the spot where you feel the “hip bone.” This is usually a thin line about two inches long, but may be shorter or longer, depending on your child’s size.

What happens after surgery?

Your child will probably not be in a cast. A bandage will cover the incision. The doctor may use a soft wedge pillow to keep the legs spread so the hips can heal in the right position. Most children are out of the hospital in four to five days. This includes children who have more than one procedure at the same time.

Dega osteotomy is not high-risk. But it does involve cutting into bone — so it will take time to heal. Recovery can be slow and uncomfortable. Your child will receive medication and therapy. These make dressing and toileting easier during the healing period.

Will my child be able to walk?

Children who could walk on their own before surgery will probably need a walker for some time. Children who were not steady on their feet will need more support. But the goal is the same for all: to be able to bear weight so that the femoral bone becomes secure in the pelvic socket. If your child does not walk on their own, they will spend time upright in a gait trainer or stander.

Will my child be able to ride in the car?

A cast is rarely needed with a Dega osteotomy, so riding in a car should not be a problem.
Will my child have pain?

Yes, your child will need pain medication at first. Right after surgery, pain medication and a muscle relaxant for muscle spasms will be given intravenously through an IV tube. Sometimes, an epidural (inserted in the spine) is placed during the surgery. This is another way to deliver local pain relief right away. The epidural comes out before your child goes home. After a few days, your child should be able to receive medication by mouth. If there is a g-tube (a tube inserted in the abdomen to deliver food directly to the stomach), pain medication is given through it.

Our staff is trained to help make children as comfortable as possible in the hospital. Once you go home, please call the office if pain is a problem or the pain medication your child’s doctor prescribed causes side effects.

Will my child need physical therapy?

Yes. Therapists will work with your child at the bedside in the hospital, then advance to working on range-of-motion improvement, and eventually to standing and/or walking.

When will my child need to return to see the doctor and get X-rays?

The first visit is typically four weeks after surgery. An X-ray will be taken at this appointment. Please check with your insurance now to see if you need to get X-rays at a facility outside Nemours. If so, ask your care team for an X-ray prescription before your child leaves the hospital to go home.

When will my child be able to return to school and the school bus?

It varies, but it usually takes about four weeks before a child is comfortable enough to ride the bus and be at school all day. A lot depends on your child’s comfort at school, how far they travel on the bus and whether the school can help make things easier during recovery.

How long will it be until my child has completely recovered?

Recovery is different for each child. It depends on how your child responds and how many surgical procedures were done. Bone typically heals in three to six months.

Will this surgery ever need to be repeated?

No, it seldom needs to be redone.

What are the possible complications with this surgery?

Complications are very rare. An infection can happen with any surgery. Most are minor, treatable and do not delay recovery.