Anesthesia in the Heart Center

What information should I be sure to tell my anesthesiologist before the procedure?
It is important to share your child's medical history with your anesthesiologist before surgery. This information includes allergies, current medications (including non-prescription, herbal or homeopathic treatments) and when they were last taken, prior surgeries, previous complications with surgery or anesthesia, any family history of problems with anesthesia, and information about any other medical problems your child may have.

How do you monitor my child during procedures?
The anesthesia team will place various catheters and monitors on your child. Most of these can be placed after your child is asleep to reduce stress and anxiety. There are some circumstances which might require IV access while your child is awake. The anesthesiology team will discuss this with you in advance. Your child's vital signs will be watched continually until they are fully awake using a variety of monitors.

What are some common side effects of anesthesia?
Many children are groggy and might be cranky or confused for a while — perhaps several hours — after waking up. Some children become severely agitated and upset after anesthesia, this is not unusual in children. If this happens, the anesthesiologist may provide mild sedation to help your child calm down and recover. Nausea and vomiting may also occur after anesthesia, and the care team can provide medicine to help reduce this. Other common side effects include sore throat and shivering. Please notify your care team if any of these side effects persist into the next day.

What are some of the risks of cardiac anesthesia?
Pediatric cardiac anesthesiologists have an understanding of heart anatomy and the differences that can exist in children with heart defects. Some heart conditions will require more than one procedure. Anesthesia is necessary to reduce the pain and stress associated with many procedures. Post-traumatic stress disorder can develop in children exposed to many stressful conditions in the absence of anesthesia.

Young age and diseases like heart defects add an additional level of complexity to anesthetic care. However, anesthesiologists with specific training in pediatric heart disease have experience in dealing with these additional risk factors.

What are the known effects of anesthesia on my child's development?
The U.S. Food and Drug Administration (FDA) issued a safety announcement in December 2016 regarding the potential effects of sedatives and anesthetics on children younger than 3 years of age.

• A single, short exposure to sedation or anesthesia appears to be safe
• There is some evidence that longer (>3 hours) or repeated exposures could have negative effects on behavior or learning
• Much more research is needed

Because sedation or anesthesia is necessary during most procedures to keep your child safe and comfortable, discuss the following items with your doctor before your procedure.

• Should the procedure be done now or when the child is older?
• How long is the procedure expected to take?
• Will repeated or additional procedures be needed?

Many heart procedures last more than 3 hours, but the risks of not repairing the defects typically greatly outweigh any known potential risk of general anesthesia.
What can we do to minimize usage and risk of blood products?
Transfusions are common in heart procedures. The decision to transfuse patients is not taken lightly as all blood transfusions do carry some very small element of risk, but modern technology has dramatically improved the safety of the nation’s blood supply. All blood in the U.S. is tested for infections such as hepatitis, AIDS, Zika and more. If you or your child is a Jehovah’s Witness, please inform your treatment team so that appropriate care decisions may be made.

Why do some cases get cancelled at the last minute?
Case cancellations may unfortunately happen. Either an emergency case needs to occur first for the health and safety of another patient, appropriate post-procedure monitoring may not be available, or your child may not be in the best physical condition for a procedure. To lower the risk of cancellation, please let your care team know as soon as possible if your child has a health change such as fever, diarrhea, asthma, infection or cold/runny nose.

When will my child be awake after heart surgery, heart catheterization or non-surgical procedures?
Depending on the type of anesthesia and the procedure, your child may remain asleep for a few minutes to a few hours. After heart surgery, it might be safest to keep your child asleep for a few hours or even days after the procedure. Additional medicine is used to keep your child asleep and comfortable if necessary in the ICU.

How will my child’s pain be treated after the procedure?
Pain control is especially important after a big operation. The amount of pain medicine given after surgery can be quickly adjusted to ensure your child is both safe and as comfortable as possible. Your child may also receive sedation medicines to help manage their comfort in the ICU, which may keep them sleepy.

Can a parent or caregiver come back with the patient while he/she is going to sleep?
This depends upon the hospital and the assessment by the anesthesiologist. This should be discussed directly with your care team. Our first consideration is always for the patient.

How can we make you/your child less anxious preoperatively?
Children should hear about their hospital visit before they arrive. Avoiding talking about a procedure or surgery may make them more anxious on arrival and can make them less trusting for all future doctor and hospital visits. Bringing along a favorite book, blanket, iPad or toy may help as well. Child Life Specialists are available to assist and medications may be given to help reduce a child’s anxiety. Combative or uncooperative patients may sometimes need an injection to assure the safety of the patient and the doctors and nurses taking care of them.

Why are patients not able to eat or drink before a procedure?
Anesthesia takes away a patient’s ability to cough and clear their throat. In general, the following guidelines are followed (oral or tube feeds):

- No heavy food for 8 hours prior
- No light food or formula/milk for 6 hours prior
- No breast milk for 4 hours prior
- Clear liquids up to 2 hours

Clear liquids are those you can see through, such as water, apple juice or Pedialyte®. Encourage the patient to have plenty of clear liquids up to 2 hours ahead of time, especially if they are taking diuretics. Discuss with your doctors ahead of time which medications, if any, the patient should have the day before and the day of the procedure.

Additional CV Anesthesia Resources
Congenital Cardiac Anesthesia Society
www.ccasociety.org/for-patients-parents
Society for Pediatric Anesthesia
www.pedsanesthesia.org
FDA Statement on Pediatric Anesthesia
www.fda.gov/Drugs/DrugSafety/ucm532356.htm

For Non-Emergency Anesthesia Information or Questions:
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