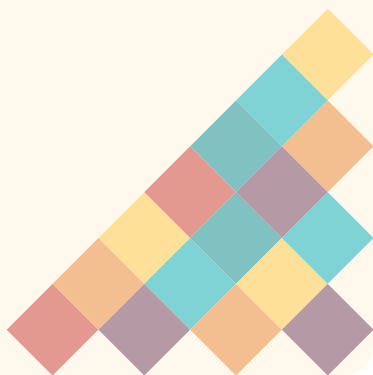


Neonatal Intensive  
Care Unit (NICU)

# Having a Baby with Intestinal Atresia

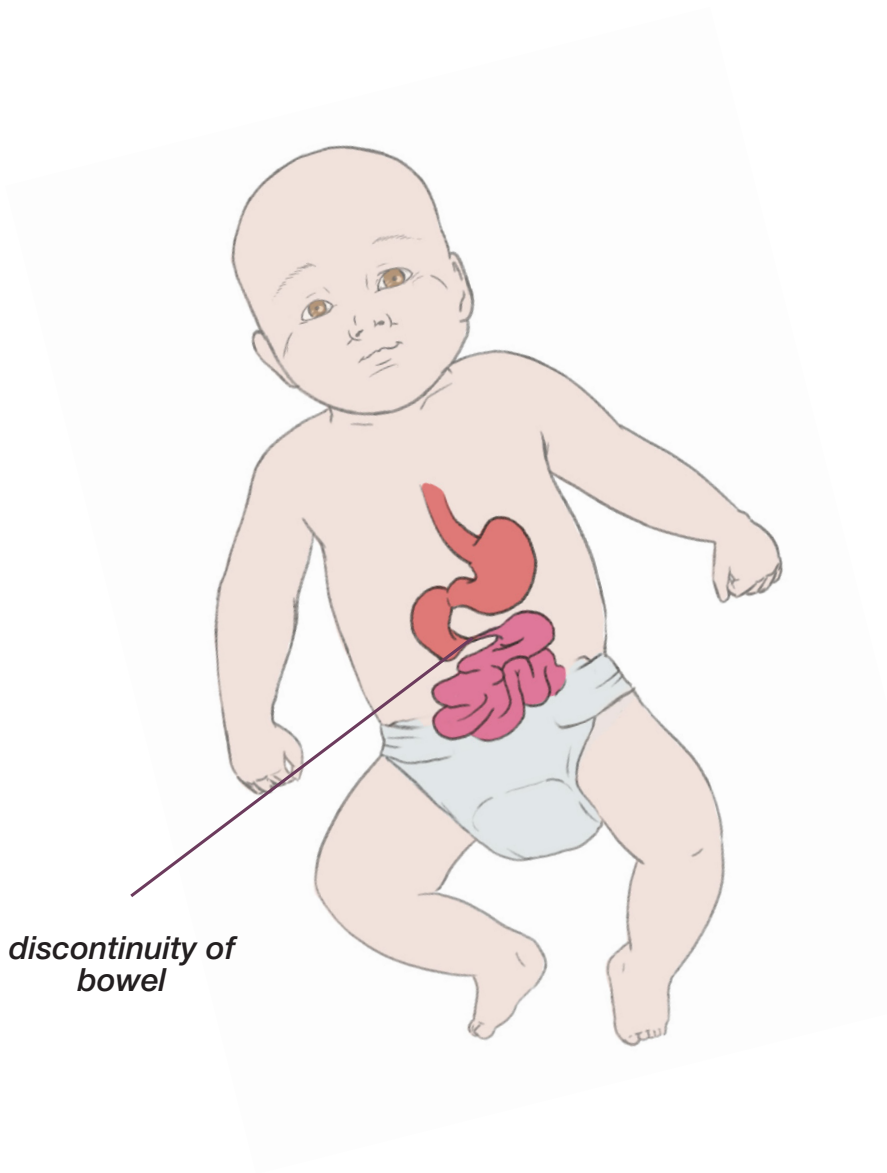


## What is Intestinal Atresia?

Intestinal atresia is a condition affecting a newborn in which a discontinuity (atresia) exists in the bowels (intestines). Instead of being an open, continuous tube, a gap exists in one or more places preventing food from moving all the way through. The seriousness of intestinal atresia varies from affecting just one small segment of intestine to missing many segments of intestine. The condition itself does not seem to cause a baby any pain, and can usually be repaired by surgery after birth. We do not know why intestinal atresia occurs except that it is an interruption of the normal process of development of the intestinal tract. Sometimes, intestinal atresia may be associated with other medical issues or genetic conditions.

## Giving Birth to a Baby with Intestinal Atresia

Generally a baby with intestinal atresia can be born vaginally. Some babies with intestinal atresia need to be born by caesarean section generally for the same reasons as babies born without intestinal atresia. For example, if the baby is not in a head-down position, a caesarean section may be most appropriate. Since babies with intestinal atresia may have other conditions and require medical care, families expecting a baby with intestinal atresia are recommended to relocate to Edmonton approximately 3 weeks before their due date.

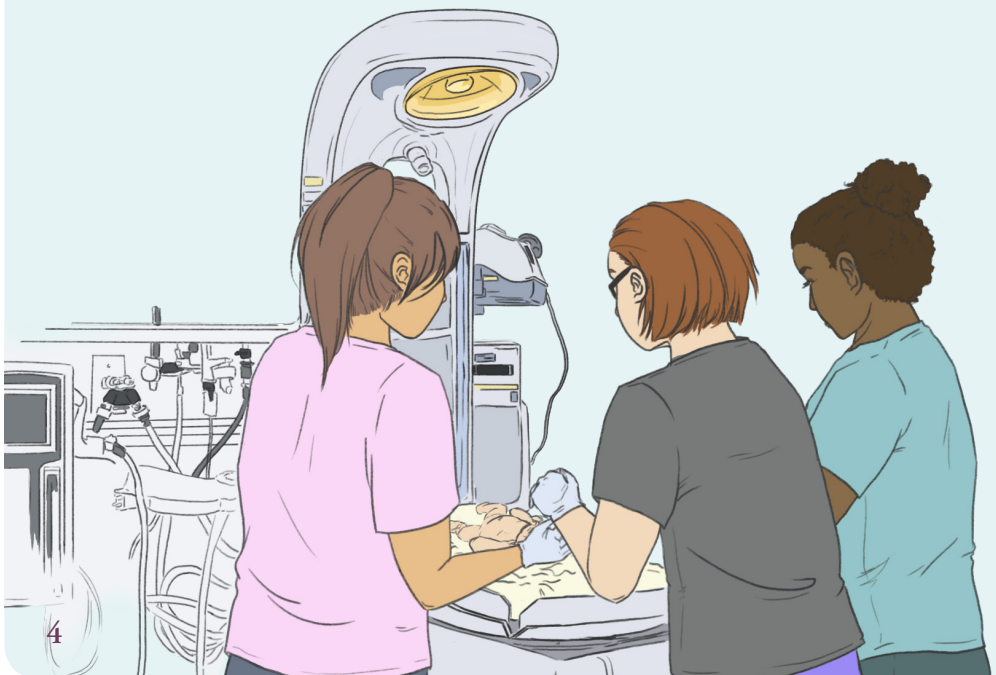


*discontinuity of  
bowel*

# Once the Baby is Born

Babies with intestinal atresia usually appear well after birth. They start to show signs such as delayed passage of stool, swollen belly from gas, vomiting of secretions or food, and/or not wanting to eat. If we think that a baby might have intestinal atresia, they are admitted to the neonatal intensive care unit (NICU) for initial tests such as abdominal x-rays. We insert a soft, plastic tube through the nose or mouth, called a nasogastric (NG) tube or orogastric (OG) tube, to help keep the stomach empty of the fluid that may back-up behind the intestine blockage. We start intravenous (IV) lines to give medications and nutrition.

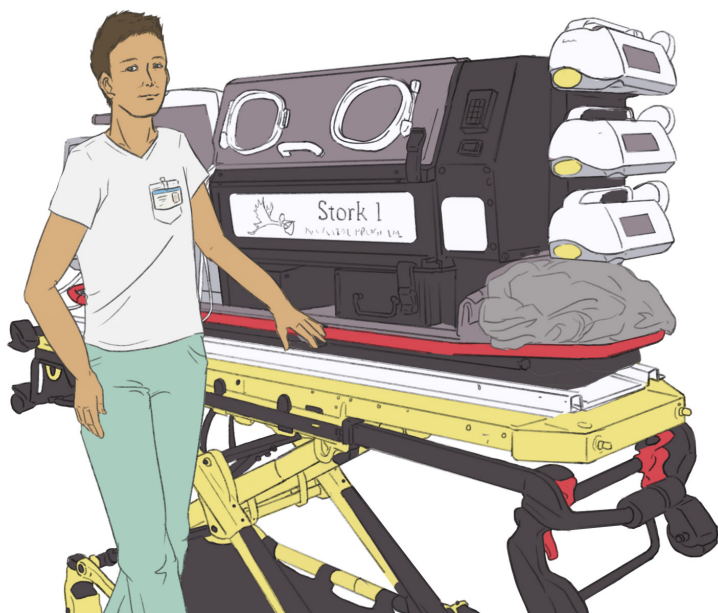
If other medical issues exist, other medications or interventions might be required after delivery. It is important for parents to spend time with their babies, and if the baby is stable, we try to help parents see and touch their baby before they are moved to the NICU. Parents should let the medical team know of any special wishes they have for the delivery so we can do our best to accommodate these requests when possible.



# Transfer to the Neonatal Intensive Care Unit

If the medical team thinks that intestinal atresia is likely, babies are transferred to the University of Alberta Hospital NICU. For transfer, a specialized transport team uses an incubator that looks like a plastic box with monitors and machines fastened to an ambulance stretcher. This transport incubator keeps babies warm, secure, and protected as we keep providing medical treatments in the ambulance. Usually, it is a calm, slow ambulance ride to the University of Alberta Hospital.

Mothers have to remain at the birth hospital until they have recovered. Other family members can follow the ambulance by car and come directly to the NICU. Typically mothers delivering vaginally may be discharged within a day of delivery. Mothers delivering by caesarean section usually require three to five days in the hospital, however they may receive passes to visit the NICU earlier depending on their recovery. Parents are essential to their baby's care in the NICU and are welcome at anytime of the day or night.

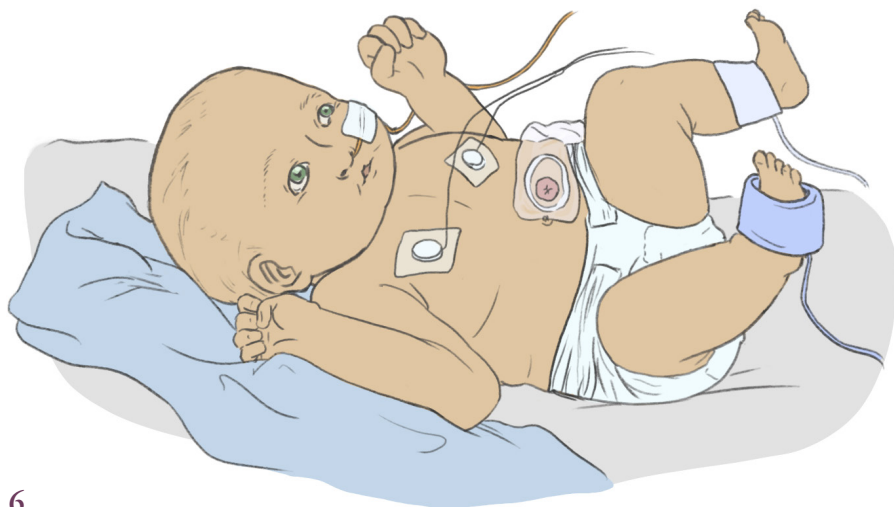


# Treatment of Intestinal Atresia

The University of Alberta NICU team, including the pediatric surgeon, examines babies with suspected intestinal atresia after they arrive. Specialized IVs are inserted through the belly button (umbilical lines) or elsewhere on the body through a vein in an arm, leg, or scalp (peripherally inserted central catheter, PICC line). A series of x-rays, sometimes using dye in the intestines called a contrast study, checking for bowel continuity might be needed to confirm the presence of intestinal atresia. If intestinal atresia is identified, surgery is needed.

In the operating room, the surgeon makes an incision in the abdomen and examines the intestine to find the discontinuity. Sometimes the surgeon has to remove parts of the intestine. Depending on the health of the bowel, the bowel may be reconnected during this surgery to form a continuous tube. In this situation, the baby will return from the operating room with a surgical wound over the abdomen.

If the bowel, however, needs time to heal, a portion of the bowel is sutured to the abdomen wall to allow digested food an exit point through the skin. This surgically created opening is called an ostomy.



An ostomy is usually a temporary procedure and can be “reversed” once the bowel has had some time to heal. Typically, the second surgery to reverse the ostomy is completed 1 to 2 months after the initial surgery. Between these surgeries babies can often be fed. Stool collects in a removal bag placed onto the skin over the ostomy site.

Various medical therapies are required to take care of babies with intestinal atresia before and after surgery. Since babies with intestinal atresia cannot eat prior to surgery, we provide nutrition through an IV. This is called total parenteral nutrition, or TPN. This solution includes everything the baby needs to grow: sugar, protein, and fat. Although we do not think that intestinal atresia itself causes babies pain, we give pain and sedation medications as needed before and after surgery to keep the

baby comfortable. If not required earlier, babies with intestinal atresia need breathing support with a breathing tube and machine (ventilator)

around and after the time of surgery.



After surgery, the recovery period involves slowly decreasing the medications and breathing supports. Often we are able to remove the breathing tube within a few days of surgery. Once the baby shows signs that the intestines are recovering (such as the passage of stool or gas and less fluid coming out of the NG or OG tube), we start feeds slowly either through the NG or OG feeding tube or by mouth. This first feed can be pumped breast milk. Once the baby tolerates these feeds then we help mothers and babies as they begin breastfeeding or bottle-feeding. Figuring out breast or bottle-feeding can take a few to many weeks after the surgery. The nurses will help mothers to start pumping breast milk as soon as possible after delivery to establish and maintain their milk supply. A lactation consultant is available to support parents.





# Being a Parent in the NICU

Being a parent in the NICU can be an overwhelming experience. We recognize that it can be alarming for a parent to see their child connected to medical monitors, intravenous lines, and other medical equipment. We understand that seeing all of this might make bonding between parents and their children harder. It is important for parents to touch, talk, and be present for their babies even though it might not be possible for them to hold them out of the bed. Your team can suggest alternative methods to cradle or hold your baby in the bed. As soon as we can, we help parents hold their babies. As a NICU team, we support families and value their voices.

There will always be nurses and respiratory therapists to make sure a baby receives the care they need. The medical team can help explain the medical equipment and procedures. Every morning, a whole team of doctor, nurses, and other practitioners see the babies and decide about care. We call these “morning rounds” and parents are encouraged to be there to ask questions and express concerns. As well, every family meets a social worker who will provide support and help access resources.

Parents are welcome to bring personal and comforting items for their baby such as photos, small stuffies, blankets and clothing — best if the clothing is not knitted or woven as these could get caught on some of the supports and equipment like IV’s. Diapers and other supplies needed for daily care are provided. Family and friends can come visit the baby. There is a reception on the unit for safety and security.

# Preparing for Hospital Stay

We suggest that parents prepare for a hospital stay of 1 to 2 months after birth. Multiple issues might make the hospital stay longer, such as taking time to tolerate feeds, reflux of feeds, wound infection, or other medical issues. We talk about everything with parents as soon as we anticipate or notice a complication happening. Often, the baby will be moved to another Edmonton-area NICU or to a general pediatric unit of the University of Alberta Hospital during recovery. Before families go home, we make sure that babies have a primary care provider (family doctor or pediatrician) and follow-up care arranged with their pediatric surgeon.



## Notes

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