Rectal Prolapse

Patient and family information, brought to you by the Education Committee of APSA

Overview - "What is it?"

The rectum is the end of the large intestine (also known as the colon) where stool travels before it exits outside through the anus.

Rectal prolapse is a condition where either a portion of or all of the rectum (the end of the colon) protrudes through the anus and can be seen on the outside of the body.

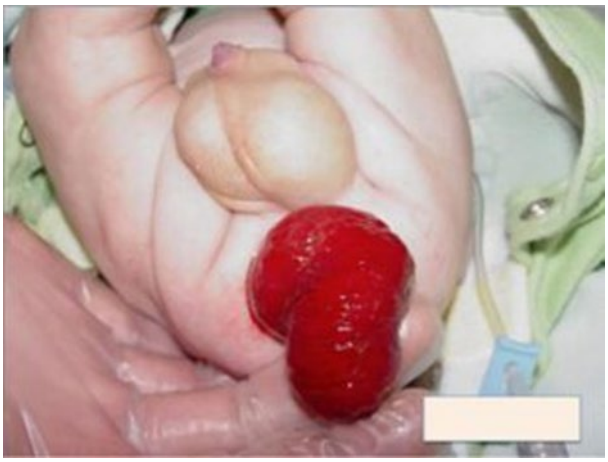


Figure 1: Infant with rectal prolapse.

(Pictures provided by Dr. Romeo C. Ignacio, Naval Medical Center San Diego, California)

Rectal prolapse (Figure 1) affects boys and girls equally but is rarely seen in the absence of predisposing conditions. It is most commonly seen from infancy to four years of age (potty training phase).

Predisposing conditions include:

- Cystic fibrosis, a genetic (inherited) disease, that can lead to chronic respiratory problems and gastrointestinal symptoms

- Diarrheal diseases
- Malnutrition
- Weakness of the muscles of the pelvis
- Conditions that increase pressure in the abdomen which include chronic cough, constipation, toilet training and excessive vomiting. Chronic constipation and excessive straining is the cause in approximately 15% of causes.

Prolapse may range from minor, which goes away spontaneously, to more severe cases that require the tissue be pushed back in manually.

Signs and Symptoms - "What symptoms will my child have?"

Rectal prolapse is usually obvious based on physical exam alone. It appears as a dark red mass at the anus. The mass may only be present during stooling. (See Figure 3A)

A mass at the anus that does not go away on its own. The mass needs to be pushed back in before the blood flow to the segment is compromised.

Rectal prolapse is associated with discomfort of having something coming out of the bottom. Increasing pain might mean that the tissue coming out may not be getting good blood flow.

Sometimes there can be passage of mucous or small amounts of blood.

Diagnosis - "What tests are done to find out what my child has?"

Usually, no blood tests are needed for the diagnosis of prolapse. If other clinical signs in your child's history indicate cystic fibrosis, malnutrition or weakness, then blood tests may confirm if these conditions are present as the cause of the rectal prolapse.

Depending on the age of the child and the clinical situation, an X-ray of the belly may be needed. Additionally, a contrast enema may also be helpful. In this test, a tube is placed inside the child's anus and contrast liquid is injected slowly. The contrast lights up the inside of the rectum and large intestine. This study shows the anatomy of the large intestine to see if anything may contribute to rectal prolapse.

Rectal prolapse may be transient. Your health care provider may ask your child to sit on the commode in the office to see if the prolapse would happen. Additionally, pictures taken at home can be helpful because the prolapse may not happen during the clinic visit.

Treatment - "What will be done to make my child better?"

Prevention: AVOIDING rectal prolapse is the main way of dealing with the problem.

- **Constipation:** If a child has constipation resulting in straining and sitting on the toilet for a long time, the sphincter muscle that holds the rectum in relaxes and makes prolapse happen. Avoiding constipating foods such as milk products, rice and bananas may help. Medications such as polyethylene glycol (Miralax®), docusate and senna may be helpful in keeping stools soft.
- **Unhealthy Stooling Habits:** When a child sits on the toilet for a long time during potty training can contribute to prolapse; limiting time on the toilet is important. Changes in stooling habits may include: restriction of time spent on the commode, use of a child-specific commode or placement of a stepstool in front of an adult commode.
- **Chronic cough** should be treated.
- **Diarrhea** should be treated.

Specific medical treatments may be necessary in some cases, such as cystic fibrosis (which requires enzyme replacement) to prevent recurrent prolapse.

In the majority of cases, rectal prolapse reduces on its own mostly after the child stops squatting.

Reduction: If the rectal prolapse does not go back on its own, gently push back (reduction) the tissue with some lubricant. Having the child lay on their side and relax may help.

If not successful, apply granulated sugar to the prolapsed rectum. Let the sugar sit for 15 minutes and then attempt to reduce the prolapse again. The sugar will absorb the extra water in the prolapse and cause the prolapse to shrink. You must use granulated sugar. A sugar substitute will not work for reducing the prolapse.

If reduction was not successful, bring the child to the doctor.

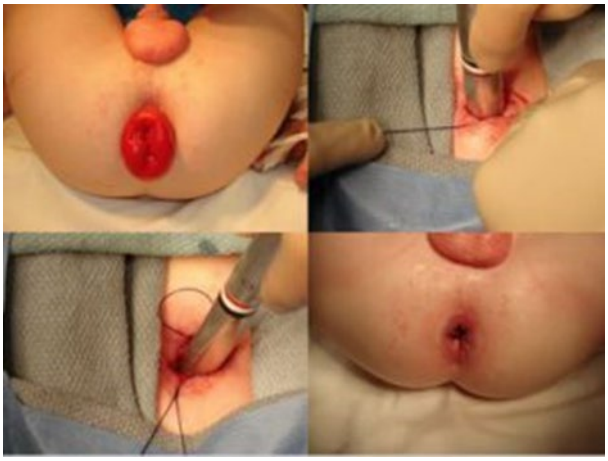
At times, your health care provider may gently reduce the prolapse using gloves and lubricant. If prolapse recurs shortly after reduction, taping your child's buttocks together temporarily may decrease the swelling in the tissue.

Surgery: This may be necessary in cases where medicines and changes in defecation habits are not successful. An operation may also be required to reduce a prolapsed rectum that cannot be reduced manually, ulcerations (injury to the lining of the rectum), painful prolapse or excessive bleeding.

A number of surgical procedures may be used (See Figures 2A – 2D). The choice of procedure is determined based on the severity of the prolapse, the underlying cause or condition, the

severity of symptoms, and the experience of the treating surgeon. The surgeon will check whether the rectum is healthy.

Infant with rectal prolapse



Suture tightened over a metal rectal dilator

Infant with recurrent rectal prolapse who underwent a modified Thiersch procedure

Postoperative result with resolution of rectal prolapse

Figures 2A – 2D: Rectal Prolapse and Surgical Procedures

(Pictures provided by Dr. Romeo C. Ignacio, Naval Medical Center San Diego, California)

In certain patients with a redundant rectosigmoid colon, consideration will be given to removal of this segment and fixing the remaining segment internally (rectopexy). This procedure is done either open (large incision on the belly) or laparoscopically (multiple small incisions on the belly to allow a video camera and small instruments to perform the procedure).

Preoperative preparation: If the child is taken to the operating room to reduce prolapse as an emergency, antibiotics will be given to decrease infection. For scheduled cases where part of the large intestine may be removed, the child may need to drink fluid to clear stool out of the intestines.

Postoperative care:

Activity: Typically, the child is encouraged to walk around as soon as possible.

Diet: Patients are started on liquids after their surgery then advanced to a general diet.

Medicines: Your child may need any of the following:

- **Antibiotics:** To help prevent or treat an infection caused by bacteria.
- **Anti-nausea medicine:** To control vomiting (throwing up).
- **Pain medicine:** Pain medicine can include acetaminophen (Tylenol®), ibuprofen (Motrin®), or narcotics. These medicines can be given by vein or by mouth.
- **Stool softeners:** Polyethylene glycol (Miralax®), docusate (Colace®) or senna are among the medications used to avoid straining after surgery.

Home Care - "What do I need to do once my child goes home?"

Diet: Your child may eat a normal diet after surgery. Avoid constipating foods such as dairy products, rice, and bananas.

Activity: Your child should avoid strenuous activity and heavy lifting for the first 1-2 weeks after laparoscopic surgery, 4-6 weeks after open surgery.

Wound care: Surgical incisions should be kept clean and dry for a few days after surgery. Most of the time, the stitches used in children are absorbable and do not require removal. Your surgeon will give you specific guidance regarding wound care, including when your child can shower or bathe.

Medicines: Medicines for pain such as acetaminophen (Tylenol®l) or ibuprofen (Motrin® or Advil®) or something stronger like a narcotic may be needed to help with pain for a few days after surgery. Stool softeners and laxatives are needed to help regular stooling after surgery, especially if narcotics are still needed for pain.

What to call the doctor for: Call your doctor for worsening belly pain, fever, vomiting, diarrhea, problems with urination, or if the wounds are red or draining fluid.

Follow-up care: Your child should follow up with his or her surgeon 2-3 weeks after surgery to ensure proper post-operative healing.

Long Term Outcomes - "Are there future conditions to worry about?"

The long-term prognosis for children with rectal prolapse is good. More than 90 percent of children who experience rectal prolapse between nine months and three years of age will respond to medical treatment and will not require surgery.

Children who develop rectal prolapse after the age of four are more likely to have underlying neurologic or muscular defects of the pelvis. These children are less likely to respond to medical treatments and should be seen early for surgical intervention.

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