

FOCUS ON SUBSPECIALTIES

Weighing their options

Pediatricians should be prepared to advise families who are considering bariatric surgery

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The evolution of bariatric surgery for adolescents has been one of caution. Several factors must be considered when advising a family contemplating a surgical option for weight control.

The first step is to make sure the adolescent meets the current criteria for bariatric surgery (see guidelines below). The American Pediatric Surgical Association Task Force on Obesity was a



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driving force behind the establishment of these criteria.

All patients should make an aggressive attempt at behavioral and medical management of their obesity, with surgery reserved for those who

have failed such attempts. Obesity programs are becoming more and more common at the major children's hospitals and may serve as referral centers or a resource for pediatricians seeking advice.

The second important consideration in advising families is to determine where to have the surgery done. Bariatric surgery can be and often is performed safely outside a children's hospital. In advising families, it is important to stress that they look for experience and expertise in dealing with the special needs of the adolescent population.

Because gastric bypass impacts teenagers'

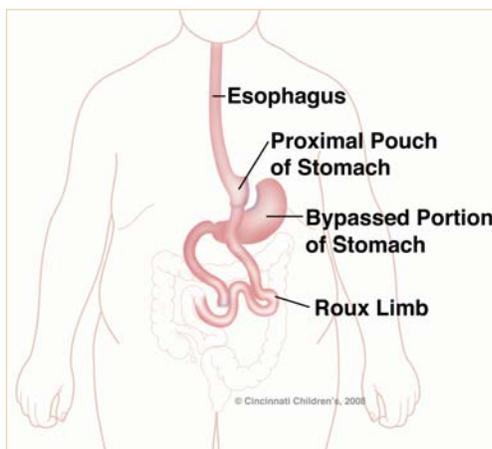


Figure 1: Roux-en-Y gastric bypass

ability to absorb nutrients, there is some concern that long-term surgical outcomes in teenagers might be different than in adults. A consortium of pediatric surgeons and their teams are looking at the long-term outcomes of bariatric surgery in a study called Teen LABS (Longitudinal Assessment of Bariatric Surgery). Five locations are participating in Teen LABS, which has received a five-year grant from the National Institutes of Health: Cincinnati Children's Hospital Medical Center, Texas Children's Hospital, University of Alabama, University of Pittsburgh and Nationwide Children's Hospital in Columbus, Ohio. Researchers hope to follow patients for 10 years.

Bariatric surgery works by enforcing behavioral modification. In other words, it's a "diet" that you can't cheat on. As a result, the lifestyle changes the patient (and his or her family) makes are essential to the long-term success of the procedure. Particularly for teenagers, some of these

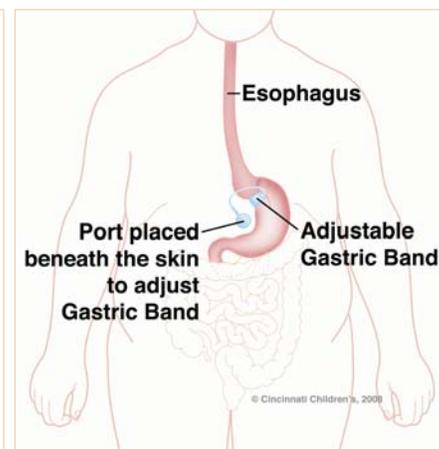


Figure 2: Lap band

changes are emotionally difficult and require health care clinicians who are able to work with this special group of patients.

The third issue for most families is which of the two major procedures is "better." Roux-en-Y gastric bypass is considered the gold standard of weight-loss surgery and is the procedure most often performed in teenagers. In this procedure, a small gastric pouch is connected to the distal small bowel, bypassing the proximal small bowel (see Figure 1). The procedure works by restricting the amount of food that can be eaten at one sitting and by somewhat decreasing the absorption of the food in the intestine.

In contrast, the adjustable gastric band (Lap-Band or Realize Band) is a device that works solely by restricting the amount of food that can be eaten (see Figure 2). The Food and Drug Administration has not yet approved the band for use in patients younger than 18 years of age. This may change soon, so information about both procedures is

important in advising families.

Both gastric bypass and adjustable gastric band procedures have been shown to be efficacious in adults and in small groups of adolescents. In general, the adjustable gastric band has a lower rate of serious complications but is slightly less effective at total and maintained weight loss. The lower rate of life-threatening complications reported with the adjustable gastric band has to be weighed against the potential risks of leaving a foreign body in place over time, a risk that theoretically should be greater in younger patients. Pediatricians should be knowledgeable about the differences and help families as they make decisions about the procedures.

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Patient selection guidelines for bariatric surgery in adolescents

- Failure to lose weight after at least six months of organized attempts at weight loss.
- Attainment or near attainment of physiologic maturity (Tanner Stage IV or V).
- BMI \geq 40 kg/m² with co-morbidities of obesity.
- Commitment to medical and psychological evaluation before and after surgery.
- Commitment to avoid pregnancy for one year after surgery.
- Capability and willingness to adhere to postoperative nutritional guidelines.
- Presence of supportive family environment.
- Ability to provide informed assent (patient) and permission (parent/guardian).