# Cleveland Clinic BARIATRIC AND METABOLIC INSTITUTE Risks and Complications

#### What are the risks of gastric bypass surgery?

The more extensive the bypass operation, the greater is the risk for complications and nutritional deficiencies. Patients with extensive bypasses of the normal digestive process require not only close monitoring, but also lifelong use of special foods and medications.

Ten percent to 20 percent of patients who have weight-loss operations require follow-up operations to correct complications. Abdominal hernias are the most common complications requiring follow-up surgery.

Rare complications of gastric bypass surgery include leakage through staples or sutures, ulcers in the stomach or small intestine, blood clots in the lungs or legs, stretching of the pouch or esophagus, persistent vomiting and abdominal pain, inflammation of the gallbladder, and failure to lose weight (very rare).

More than one-third of obese patients who have gastric surgery develop gallstones. Gallstones are clumps of cholesterol and other matter that form in the gallbladder. During rapid or substantial weight loss, a person's risk of developing gallstones increases. Gallstones can be prevented with supplemental bile salts taken for the first six months after surgery.

Nearly 30 percent of patients who have weight-loss surgery develop nutritional deficiencies such as anemia, osteoporosis and metabolic bone disease. These deficiencies can be avoided if vitamin and mineral intakes are maintained.

Women of childbearing age should avoid pregnancy for 18 months to two years until their weight becomes stable because rapid weight loss and nutritional deficiencies can harm a developing fetus.

Though gastric bypass procedures can be reversed, patients should carefully consider all of the risks and benefits before electing to have this surgery.

#### What are the risks of Gastric Banding?

Most patients have experienced at least one side effect. Common side effects include nausea and vomiting, heartburn, and abdominal pain. The most serious side effects, for example slippage of the band and/or incision, would require another operation or hospitalization.

It should not be used for people who are poor candidates for surgery, have certain stomach or intestinal disorders, have an infection, have to take aspirin frequently, or are addicted to alcohol or drugs. It should not be used on patients who are not able or willing to follow rules for eating and exercise that are recommended by the doctor after surgery.

Though gastric banding procedures can be reversed, patients should carefully consider all of the risks and benefits before electing to have this surgery.

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### Possible risks for gastric bypass surgery include, but are not limited to:

	Complication	Description
	•	From minor reactions such as a rash to sudden overwhelming reactions that
1	Allergic Reactions	can cause death.
	Anesthetic	Anesthesia used to put you to sleep for the operation can be associated with
2	Complications	variety of complications up to and including death.
	•	From minor to massive bleeding that can lead to the need for emergency sur-
3	Bleeding	gery transfusion or death.
_	5	Also called deep vein thrombosis and Pulmonary Embolus that can sometimes
4	Blood Clots	cause death.
_		Including wound infections, bladder infections, pneumonia, skin-infections and
5	Infection	deep abdominal infections that can sometimes lead to death.
-		After operation to bypass the stomach the new connections can leak stomach
		acid, bacteria and digestive enzymes causing a severe abscess and infection.
6	Leak	This can require repeated surgery, and intensive care and even death.
-	200	Narrowing (stricture) or ulceration of the connection between the stomach and
7	Narrowing (stricture)	the small bowel can occur after the operation.
-		Dumping Syndrome (Symptoms of the dumping syndrome include cardiovascu-
	Dumping	lar problems with weakness, sweating, nausea, diarrhea and dizziness) can
8	Syndrome	occur in some patients after gastric bypass.
-	0,	Any operation in the abdomen can leave behind scar tissue that can put the
9	Bowel Obstruction	patient at risk for later bowel blockage.
-	Laparoscopic Surgery	Laparoscopic Surgery uses punctures to enter the abdomen and can to lead to
10	Risks	injury, bleeding and death.
10	Need for and Side	All drugs have inherent risks and in some cases can cause a wide variety of
11	Effects of Drugs	side effects including death.
	Loss of	Including stroke, heart attack, limb loss and other problems related to operation
12	Bodily Function	and anesthesia.
	Beally Fallotion	Including Hepatitis and Acquired Immune Deficiency Syndrome (AIDS), from
13	Risks of Transfusion	the administration of blood and/or blood components.
14	Hernia	Cuts in the abdominal wall can lead to hernias after surgery.
17		Many patients develop hair loss for a short period after operation. This usually
15	Hair Loss	responds to increased levels of vitamins.
10		After gastric bypass there is a malabsorption of many vitamins and minerals.
	Vitamin and Mineral	Patients must take vitamin and mineral supplements forever to protect them-
16	Deficiencies	selves from these problems.
10		Vitamin and mineral deficiencies can put the newborn babies of gastric bypass
		mothers at risk. No pregnancy should occur for the first year after operation and
	Complications	patients must be certain not to miss any of their vitamins if they decide to go
17	of Pregnancy	ahead with pregnancy later.
		Patients undergoing gastric bypass may develop ulcers of the pouch, the bot-
		tom of the stomach or parts of the intestine. Ulcers may require medical or sur-
		gical treatment, and have complications of chronic pain, bleeding, and perfora-
18	Ulcers	tion.
		Major abdominal surgery, including the Laparoscopic Gastric Bypass, is associ-
		ated with a large variety of other risks and complications, both recognized and
19	Other	unrecognized that occur both soon after and long after the operation.
		Depression is a common medical illness and has been found to be particularly
20	Depression	common in the first weeks after operation.
21	Death	

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## Possible risks for gastric banding surgery include, but are not limited to:

	Complication	Description
1	Allergic Reactions	From minor reactions such as a rash to sudden overwhelming reactions that may cause death.
2	Anesthetic Complications	Anesthesia used to put you to sleep for the operation can be associated with a variety of complications up to and including death.
3	Bleeding	From minor to massive bleeding that can lead to the need for emer- gency surgery transfusion or death.
4	Blood Clots	Also called deep vein thrombosis and Pulmonary Embolus that can sometimes cause death
5	Infection	Including wound infections, bladder infections, pneumonia, skin infec- tions and deep abdominal infections that can sometimes lead to death.
6	Perforation	As a result of manipulating the stomach, a perforation may occur. The leaking stomach acid, bacteria and digestive enzymes may cause a severe abscess and infection. This may require repeat surgery, intensive care or may lead to death.
7	Erosion	Erosion may occur as a result of the band gradually penetrating into the stomach. This is a rare event but requires surgical removal of the band.
8	Prolapse	Also known as slippage. The band may slip, or the stomach may slip. In these cases the band may not function adequately, or cause symp- toms of gastroesohpageal reflux. This event is rare but requires surgical fixation.
9	Difficulty Swallowing	Inadequate chewing of food stuffs may cause a hold-up or blockage, perceived as chest discomfort
10	Access port problems	The access port may take an abnormal position rendering difficult ac- cess, or the tubing to the band may kink or leak. These events, though rare, may require surgical adjustment.
11	Bowel Obstruction	Any operation in the abdomen can leave behind scar tissue that can put the patient at risk for later bowel blockage.
12	Laparoscopic Surgery Risks	Laparoscopic surgery uses punctures to enter the abdomen and can lead to injury, bleeding and death.
13	Need for and Side Effects of Drugs	All drugs have inherent risks and in some cases can cause a wide vari- ety of side effects including death.
14	Loss of Bodily Function	Including stroke, heart attack, limb loss and other problems related to the operation and anesthesia.
15	Risks of Transfusion	Including Hepatitis and Acquired Immune Deficiency Syndrome (AIDS), from the administration of blood and/or blood components.
16	Hernia	Cuts in the abdominal wall can lead to hernias after surgery.
17	Hair Loss	Many patients develop hair loss for a short period after the operation. This usually responds to increased levels of vitamins.
18	Pregnancy	Pregnancy represents increased nutritional needs, and this will require periodic loosening of the band throughout the pregnancy.
19	Other	Major abdominal surgery, including Laparoscopic Placement of the Lap- Band device, is associated with a large variety of other risks and compli- cations, both recognized and unrecognized that occur both soon after and long after the operation.
20	Depression	Depression is a common medical illness and has been found to be par- ticularly common in the first weeks after surgery.
21	Death	