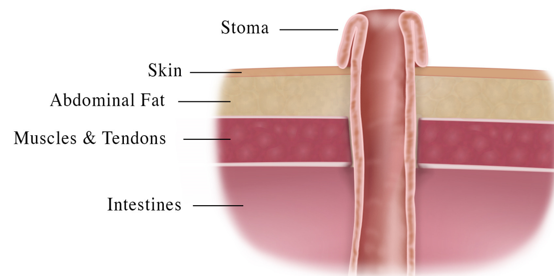
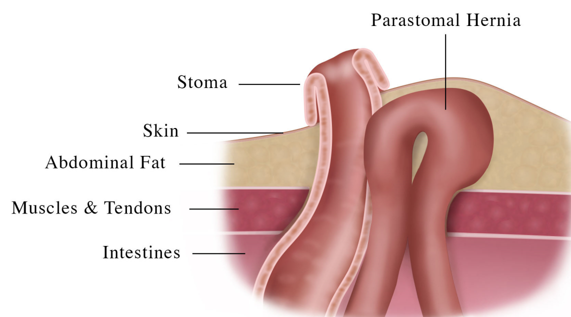
- It might be enough just to eliminate the aggravating factors (e.g., by cleaning more gently, wearing looser clothing, or putting a lubricating product in your pouch to reduce rubbing against the stoma).
- Medical treatment often involves applying a corticosteroid or cauterizing the granulomas with silver nitrate (chemically burning them to destroy the tissue and reduce their size). That's not as bad as it sounds. Cauterizing is often used for other things like getting rid of unwanted warts or skin tags. If that doesn't help or if the granulomas keep returning, they're sometimes removed surgically under a local anesthetic.

Hernias



To create your stoma, the surgeon made an incision in your abdomen and created a passageway for a portion of your intestine to reach your tummy. It first passes through the membrane that contains your intestines, then through layers of muscles and tendons, then through the fatty layer beneath your skin, and finally out through an opening in the skin.



The muscles around the stoma generally support it. But sometimes the edges of the stoma pull away from the muscles, enlarging the opening and allowing more intestines to push through – like two people comically trying to squeeze through a narrow doorway (when only one of them was invited). The resulting bulge is the first sign of a parastomal hernia, which literally means "hernia around the stoma."

Once one uninvited guest has pushed through the doorway, you can be sure that more will follow. Remember that there are about 25 feet or 7½ meters of intestines squeezed into a relatively small space. That's a lot of internal pressure. So it makes sense that the intestines are going to want to push out through any small opening.

A hernia usually starts off pretty small and tends to get bigger over time, as more intestines push through the opening, enlarging it even more.

You can also develop an incisional hernia where a previous stoma was closed. The incision closing the original opening in the abdominal muscles can re-open at some point after surgery. Again, intestines will probably push through that gap and form a hernia.

How common are hernias?

Short answer: very.

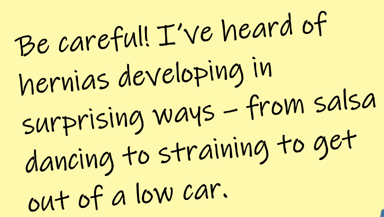
It's one of the most common complications of ostomies.

There are a lot of different numbers floating around, even from solid medical sources. But generally, most report that over time, up to about 50% of colostomates and 30% of ileostomates will develop a hernia.

John Byron Gathright, Jr., MD, Past President of the American Society of Colon & Rectal Surgeons, has been quoted as saying *"It doesn't matter if God himself made your ostomy. If you have it long enough, you have a 100% risk of a parastomal hernia."* Read that carefully, though. It doesn't mean 100% of ostomates *will* develop a hernia, but 100% of them are *at risk* for it. And that's bad enough!

Causes

The main cause of hernias is strain – anything that increases pressure within the abdomen. Of course this includes lifting and strenuous physical activity, but also coughing and sneezing. Even strenuous laughing can do it. This is especially true in the weeks and months just after surgery. Remember all those intestines squeezed into a small space, under a lot of internal pressure, looking for a way to come out? You don't want to add to that internal pressure, especially when the opening is trying to heal itself and seal shut.



If you've made it a year or more post-surgery with no hernia, your odds are looking better. It's still possible to get one, but it would take more. Like heavy lifting could still do it, but a belly laugh? … not so much.

Sometimes a post-surgical infection can result in a hernia too, but this isn't nearly as common.

Risk factors

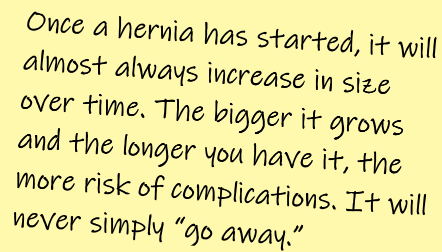
These risk factors increase the odds of developing a hernia because they weaken your body's resistance to abdominal strain.

- Overweight (probably the biggest risk factor)
- Female
- Over 60
- Smoking (weakens connective tissue)
- Chronic constipation
- Poor nutrition
- Some medications (like corticosteroids)

- Pre-existing medical conditions (including diabetes, high blood pressure, cancer, inflammatory bowel disease, lower serum albumin levels, and advanced liver disease with ascites)
- Previous abdominal surgeries (Caesareans, previous hernia repairs, etc.)

Complications

A hernia may never present any problems or symptoms other than an unsightly bulge. But because complications can arise in any of the following areas, even after years, it's good to stay watchful.



- **Baseplate attachment** – A hernia usually makes a pronounced bulge in your abdomen. It's not as easy to attach a baseplate securely to a round and maybe uneven surface as it is to a flat surface. That's why a concave baseplate can be a good choice here. Also, if the hernia is large enough, it might mean you can't see your stoma any more, making it more difficult to attach the appliance.
- **Stoma shape** – The increasing bulge can stretch your stoma opening. This might mean switching from a baseplate with a perfectly round, pre-cut hole to one where you have to cut your own hole, in your own unique shape. This shape can change if your hernia reduces when you lie down and increases when you stand up (some hernias change with posture; some don't).
- **Stoma size** – The hernia might stretch the stoma opening to a larger size – still round, but bigger. If you don't notice this slight change and don't increase the size of your baseplate hole, it can lead to output seeping under the baseplate and irritating your skin.

- **Fragile skin** – The larger the hernia, the more your skin is being stretched. If it's stretched too much, it can become more fragile and easily irritated.

- **Stoma functioning** – A hernia can change how stool passes through your bowels. This could be anything from constipation to diarrhea.

- **Irrigation** – If you irrigate, a hernia might make it more difficult. This depends very much on the positioning of the herniated intestines.

- **Stoma retraction** – As the bulge increases, the stoma can become retracted. This can make leaking more likely. You may have to switch from a flat or concave baseplate to a convex one.

- **Stoma prolapse** – The opposite of stoma retraction. It means your stoma is protruding out of your abdomen more than normal. It can happen with or without a hernia, but because it's literally being pushed out from inside, it frequently co-occurs with a hernia. In extreme cases, it can require surgery.

- **Incarceration** – Often the intestines forming the hernia can be pushed back into place inside the intestinal wall or go back naturally, at least partway, when you're lying down. This doesn't mean the hernia's gone, of course, just that some intestines are slipping in and out of the opening in the abdominal wall with changes in posture, making the hernia slightly bigger and smaller. But sometimes the intestines can become "trapped" out there, and don't go back inside even when gently pushed. This means they're incarcerated. While these intestines won't go back inside, more can come out over time and become incarcerated too (i.e., the hernia can keep growing). This can lead to what's called "loss of domain" – see below.

- **Loss of domain** – This means more of the intestines are now outside the abdominal cavity than inside it. The loss of domain can be so significant that a hernia repair can no longer be done, or at least not without significant risk. Basically, you don't want to get to this point. So if you have a large hernia, check in with your doctor or surgeon regularly to make sure it's not getting *too* big.

- **Strangulation** – A portion of the intestine that's herniated can become twisted or kinked. Fortunately, it's not all that common. This is the most serious potential complication and often requires emergency surgery. There could be symptoms like pain and blockage, but the first thing you notice might be a change in appearance – particularly in color.

If your stoma changes from a healthy red to a dark purple or black color, with or without pain (and with or without a hernia), it's definitely time to go to the ER.

Prevention of a hernia

Take heart. There are many things you can do to reduce your risk of developing a hernia. You just have to be pro-active about it.

Before ostomy surgery:

If physically possible and if you have enough time to make a difference, do exercises (like Pilates) to build up your core abdominal muscles.

I know this is easy to say, but if you're overweight, try to lose as much as you can before surgery (while keeping up your nutrition). Every little bit helps.

Stop smoking, even temporarily. Now don't roll your eyes at me, smokers. I'm one of you. Believe me, I know how hard it is! Just remember that the longer you can stop or at least cut down as much as possible, the more likely your incision will "take." Even a few weeks can make a difference.

Talk to a stoma nurse about getting a hernia belt to wear after surgery. OK, if you're a non-smoking 25-year old male fitness freak with rock hard abs, and swear you won't lift anything heavier than a Chinese noodle for the next 12 months, you might be able to skip this. But many surgeons don't even suggest it to patients at *high* risk for hernias! Bottom line: if you think you're at any risk, don't wait for someone to suggest it, because by then it may be too late. Make it your business to get a hernia belt yourself. It's a very small inconvenience for a very BIG gain.

There are other support garments on the market, like support briefs and waistbands, and abdominal binders. Like hernia belts, these all help to support the abdomen, though not as much.

After ostomy surgery:

Smoking after surgery reduces the oxygen in your tissues (among other things), prolonging recovery and increasing the risk of infection. Even after the wound looks like it's healed on the outside, it continues healing for up to a year on the inside. Smoking can interfere with that process – increasing your chances of developing a hernia. So the longer you can stay off cigarettes post-surgery, the better.

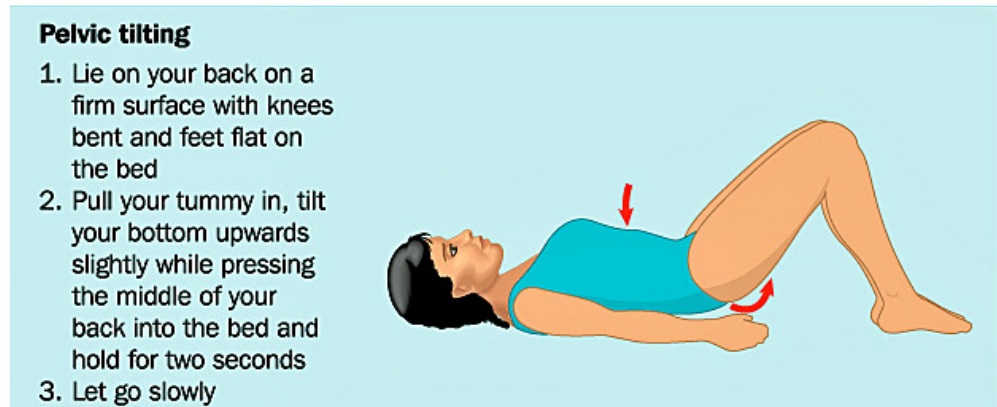
If you have a hernia belt or other support garment, start wearing it as soon as you can. And not just if you're going to lift something. You should wear it all day, only taking it off for bathing and sleeping. If you have a chronic cough, you might even want to sleep in it too. Do this for at least 6 months. Personally, I'd do it for a year.

Remember that the goal is to support your abdominal muscles, not constrict them. Don't make it *too* tight. You know those pictures of Victorian ladies cinching in their waists until they can't breathe? Not that.

Even if you're wearing a belt or support garment, do everything you can to **avoid abdominal strain**.

- Press a pillow or folded blanket, or even just your hands, over the stoma area when you cough or sneeze. If you can do anything to reduce coughing or sneezing, this is the time to do it. Like a cough suppressant, or allergy medication.
- Don't lift … well, almost anything really … for at least the first 8 weeks. Longer if you're at high risk. Not a basket of laundry. Or a roast chicken. Or a baby. See the *Think Like a Survivalist* section in Chapter 1 for more information about what *not* to lift.
- Grocery shopping, for example, involves a surprising amount of lifting – lifting things off the shelves and into your cart, out of the cart at the cash, toting bags to the car, then into your home, then putting them away. Each small item or step might not seem significant, but it adds up. At the end of the day, you've done an awful lot of lifting and toting. Be extra cautious about this – smaller, more frequent trips to the store, enlisting help, whatever it takes.
- Go easy on chores like gardening, vacuuming, changing sheets, or anything that requires physical exertion. Wave a feather duster around if you must, but otherwise let these chores pile up or rely on others to do the dirty work for now.
- Getting up from a bed can strain the stomach muscles. Roll out of bed instead of sitting straight up. Or install a bed rail, like they have in hospitals but smaller.

- After about 8 weeks, you can supposedly start lifting and return to most normal activities again, within reason. But don't rush it. Check with your doctor to make sure you've healed well. Listen to your body and don't try to be a hero. Take a few months. If you're at high risk, take a year! There's no time limit on protecting yourself.
- A few months after ostomy surgery, you might want to consult a physiotherapist trained in techniques to gradually improve abdominal muscle tone, particularly in folks who've had surgery. If they tell you to do sit-ups or lift weights, then run *(away)!* But modified sit-ups with bent knees, pelvic tilts, swimming, walking, Pilates, etc. – these are all good.



Treatment of hernias

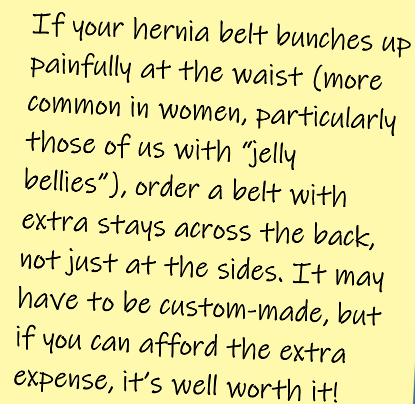
You've basically got two options – surgery or no surgery (at least for now). This isn't a time for home remedies. A squirt of baby oil or eating a few marshmallows aren't going to do the trick here. This is a decision you must make with your doctor.

1. Non-surgical

If the hernia is small and not causing any problems, your doctor might recommend a more conservative, management approach rather than surgery. At least for now. Hernia surgery has a pretty high recurrence rate. And the more surgeries you have, the higher the risk that it will happen again. So it's not something to be done in haste.

Here are some things you can do to try to avoid or delay surgery (if your doctor says you can wait):

- Wear a hernia belt, which is different from a hernia *prevention* belt. Make sure you're carefully measured for this. It isn't something to order off the shelf, like a support garment. Best to have a stoma nurse measure you and order it, if possible. There are many factors to consider, and several very specific measurements needed.



- Most hernia belts are made with a hole for the pouch to come through. There *are* hernia belts with no holes. They're most common in Europe. The rationale for this type of belt is that putting a hole in the belt is basically recreating the situation that gave you the hernia in the first place – providing an opening for intestines to push through. Two stoma nurses have assured me that these belts don't cause pancaking. That may be because they don't hold your abdomen in as tightly as you might need if your hernia is pretty big. But if it's relatively small, you might want to try out a hernia belt with no hole.

- Put the hernia belt on before you get out of bed in the morning. If you have to take it off during the day, lie down for 5–10 minutes before putting it back on. This is to give your herniated intestines a chance to slip back inside as much as they can, which is where you want them to be when you put on the belt. If you allow the intestines to come out more, bulging out between your abdominal muscles and the skin surface, then all you're doing with the belt is squeezing them, which can lead to problems. Even if your hernia doesn't look like it reduces in size when you lie down, you can tell by pressing on it. After you've laid down for a while, it will probably feel softer.
- Be *extremely* careful about abdominal strain, as discussed above. At this point, you already have a hernia. It won't take much to make it grow larger. It may even grow larger on its own, but at least don't help it along.
- This is a good time to cut down on your risk factors for a recurrence, in case you do end up having the hernia repaired surgically somewhere down the road. You can't change some things, but you can try to lose weight if that's an issue, cut down on smoking, work on getting diabetes or blood pressure under control, that kind of thing.

2. Surgical

The following is general information about hernia repair surgery, to help you have an informed discussion with your doctor.

Speaking of doctors, be sure your surgeon is experienced in hernia repairs. Try to avoid a general surgeon who hasn't done a lot of them. Hernia repairs are typically the domain of colorectal surgeons or trauma

surgeons. If you're fortunate enough to live near a hernia center, that could be a good option. Hernias are all they deal with. But even then, make sure the surgeon is experienced with parastomal hernias.

Don't hesitate to ask questions at your first consultation with a surgeon. For example, you might want to ask …

- Why are you recommending surgery over non-surgical management of my hernia?
- Have you done many hernia repairs?
- What technique would you use (e.g., open or laproscopic?), and why?
- Will you use a mesh? Why or why not?
- Will you re-locate my stoma to another position on my abdomen? Why or why not?
- What are the risks in my particular case, including the risk of recurrence?
- Do you have any recommendations to reduce those risks?
- How long will I probably be in the hospital?
- What can I expect after surgery?
- Will the incision affect the placement or adhesion of my baseplate, short-term or long-term?
- Will I need any kind of home care?
- Am I likely to need a wound vac, JP drain, or negative pressure device (explained on next pages) during recovery?
- What are some normal symptoms I might experience during recovery, that I shouldn't worry about?
- What symptoms would warrant a call to you or a visit to ER?

Here's a little overview of hernia surgery, to help you understand the answers to some of those questions:

The surgery is either done laparoscopically (through a few tiny "keyhole" incisions) or "open" (a full incision in the abdomen).

A mesh is often used to reinforce the tissue surrounding the repair. This significantly reduces the chance of the hernia recurring. Although it carries a small risk of infection, it's generally the technique of choice and preferred over simply stitching up the opening in your abdominal wall after your intestines have been pushed back inside.

A parastomal hernia might be repaired and the stoma left where it is, or it might be repaired and your stoma moved to a new location on your abdomen.

After surgery, blood and other body fluids can build up inside, which can slow healing or cause infection. There are two ways to drain this fluid. Both types of drains may be left in place for varying lengths of time, from days to weeks, as determined by your doctor.

- With a wound vac, the wound is left open with a tube coming out, leading to a portable vacuum machine that "sucks the gunk out" while you're healing. The wound is covered with a dressing that's changed regularly, usually by in-home nurses.
- With a Jackson Pratt ("JP") drain, the surgical wound is closed, but you're left with a thin tube poking out, draining the fluids into a squeezable bulb attached at the end. You empty the bulb as needed, into the toilet. You may be asked to keep track of how much fluid accumulates in the bulb every day, what color it is, etc.

Negative pressure wound therapy (NPWT) is another option your surgeon might use to speed healing and reduce infection. After the incision is closed, a small vacuum device is placed over the wound. It literally sucks up debris and fluid on your skin, increases blood flow to the area, and all kinds of other good stuff. It can stay in place for several days or longer.

For tips on making life easier during your recovery from surgery, see the *Take Time to Heal* section of Chapter 2.