Newsletter

Treating parastomal hernias – the surgical perspective

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This article is based on a presentation given by Dr. Peter-Martin Krarup, (Denmark) at the Coloplast Ostomy Days 2018.

Working as Consultant Colorectal Surgeon at the Zealand University Hospital, Roskilde, Denmark, Peter-Martin has a strong interest in the impact of surgical complications, including anastomotic leakage and parastomal hernia. He's an active member of the database steering committee of the Danish Colorectal Cancer Group and a former consultant in the Copenhagen Ostomy Database.

In this article, we present an overview of the surgical options for treating parastomal hernias, and explore the role nurses can play in helping patients make informed decisions.

What is a parastomal hernia?

A parastomal hernia is an incisional hernia related to an abdominal wall stoma. While there is still a lot that isn't known about the incidence of parastomal hernias, many surgeons share the opinion of Dr John Cedric Goligher, who stated back in 1984 that "some degree of parastomal herniation around a colostomy is so common that this complication may be regarded as inevitable."[1]

Studies have shown that the overall incidence of parastomal hernias in ostomy patients increases over time – reaching approximately 30 per cent after one year, 40 per cent after two years, and at least 50 per cent after three years.[2] Patients with a colostomy are more likely to develop a parastomal hernia than patients with ileostomies; and patients with an end-ostomy are more likely to develop a parastomal hernia than patients with a loop-ostomy.

Symptomatic or asymptomatic?

If development of a parastomal hernia is relatively common amongst people living with an ostomy, the question arises, is that a problem? And, if so, does it call for surgical intervention?

Technique	What	Benefits	Drawbacks
Relocation	Moves the stoma to the other side	Simple technique; Recommended only if the stoma is not visible to the patient	Risk of parastomal hernia on the other side; and a 50% risk of an incisional hernia developing at the old stoma site
Local suture repair	An incision around the stoma, excise the stoma sack and reduce the contents	Simple procedure	High recurrence rate (between 50-100%)
Local onlay mesh repair	Same procedure as local suture repair, but a mesh is inserted as well	Reduced pain with circumstonal incision; Reduced risk of recurrence (when compared with local suture repair)	Have to decide what type of mesh to use (biologic vs synthetic); issues regarding mesh complications
Intraperitoneal keyhole	Locate the aperture around the stoma, stitch it and place a mesh on the inside to enforce the area	Simple procedure	Rates of synthetic mesh infection are low
Intraperitoneal Sugarbaker	Close the lateral space, Lateralize the bowel and put a mesh to cover both the bowel and the opening in the abdominal wall	Gold standard procedure at the moment	Reduces the risk of recurrence, risk of infection is low (around 2%)

An old dogma amongst surgeons maintains that most parastomal hernias are minimally systematic. However, the patient perspective, as revealed in various studies, challenges that notion. In a French study from 2011[3], only 24 per cent of the participants were asymptomatic, and 30 per cent required surgery in order to carry out their daily activities. A Danish study from 2015[4] found that almost 60

per cent of patients with a colostomy reported a parastomal hernia. These patients had significant symptoms such as leakages, pain around the stoma site and bad smells. Thus, the current literature indicates that patients with parastomal hernias are indeed symptomatic – but what can be done to address these symptoms?

Surgery versus watchful waiting

There are two treatment options available for parastomal hernias: *watchful waiting* and *surgery*.

Watchful waiting

Watchful waiting is the most common approach, but the risks of this treatment option are unknown. There's no way of knowing if the hernia will increase in size over time, or if surgical repair will become more complex as a result of waiting. And there is no data to substantiate when to intervene during the waiting period.

Dr. Krarup highlights how nurses can help in this regard: "I would urge you to start collecting data systematically, so we can have a collective effort to try to optimise the non-operative measures for these patients."

The surgical option

From a surgical perspective, there are only two absolute indications for surgery: evidence of bowel ischemia and a non-resolving obstruction. All other indications, including leakages and cosmetic complaints, are considered relative. When deciding whether or not to operate on a benign condition, the patient needs to be made aware of the outcomes. They have to consider the likelihood of pain after surgery; mesh complications; and altered stoma function, which may not improve after the surgery.
Surgery may also have an impact on their appliances, as they might have to change these after the operation. There is also a lack of evidence regarding the long-term effects of surgery; whether or not it actually will result in a long-term relief of symptoms and improved quality of life remains unclear. Anyone contemplating surgery needs to take all of these factors into consideration before making a decision.

How to optimize patient health prior to surgery

- Use a CT scan to classify the hernia prior to surgery
- Correct anemia, diabetes and malnutrition
- Get them to stop smoking min three months prior to surgery
- Encourage them to lose weight, target BMI < 35
- Focus on increasing exercise
- Remember the patient lifecycle

The role of the nurse

As these pre-surgery conversations are so important in managing patient expectations, nurses play an important role in giving patients the information they need to select the best treatment option for them.

Dr Krarup encourages nurses to visit the operating theatre and get first-hand knowledge of how these surgeries are performed, so they can better explain the various treatment options to patients. He also highlights the importance of optimising patient health prior to surgery. By helping to evaluate the patient's weight and overall physical condition, and keeping an eye out for surgical and medical comorbidities, nurses can make sure these are addressed in the best way possible prior to surgery.

For nurses and doctors alike, it's important to remember that when a patient turns up in the clinic with a parastomal hernia, he or she has been through a long, tough journey. Dr Karup explains one possible patient journey:

"They've gone from being a healthy person, to getting a cancer diagnosis. Then they've had complex surgery and had to adjust to life with an ostomy. Then they experienced a complication that resulted in a parastomal hernia and reduced quality of life. This patient lifecycle has to be taken into account when counseling the patient and planning their further treatment."

References

1. Goligher JC, Duthie HL, Nixon HH
   Surgery of the anus, rectum and colon 1984
2. Antoniou et *al.* Hernia 2018, 22:183-198
3. Ripoche et al J Visc Surg 2011
4. Feddern et al Colorectal Dis 2015