

The Ostomy Life Study Review is a recurring publication developed by Coloplast in cooperation with expert ostomy care nurses in the Global Coloplast Ostomy Forum.

How much do we know about *peristomal bulges*?

As part of the Ostomy Life Study 2016, a literature review was conducted to separate 'myths' from facts regarding peristomal bulges and the challenges facing people with an outward peristomal body profile.

Its objective was to uncover whether or not there is robust scientific evidence behind some of the wide held beliefs about the cause and management of an outward peristomal body profile or peristomal bulge. The overview of identified 'myths & facts' was shared with Coloplast Ostomy Forum boards all over the world for validation.

A common complication following ostomy surgery is the development of a peristomal bulge² and many of these bulges have shown to be parastomal hernias.

From the literature^{2-8;16} we see that the incidence of parastomal hernias varies from 11% to 60% depending on the study method and type of ostomy. Parastomal hernias are mainly seen as a non-symptomatic challenge and thus not repaired⁹, but in 10-30% of the cases, chronic peristomal pain or intestinal incarceration and strangulation require a reoperation.⁵

However, patients who have bulges due to weak abdominal muscles will probably not benefit from surgical repairmen. Even though the issue is common, how robust is the available knowledge about peristomal bulges?



A main challenge when searching for evidence-based knowledge on peristomal bulges including parastomal hernias is the inconsistency in definitions. When reading the literature, you may not know if the incidence of a parastomal hernia is a true hernia or just a bulge.

Question #1

Is a bulge in the peristomal area always a hernia?

A bulge can be difficult to distinguish from a parastomal hernia by clinical examination only.¹¹ And a lack of a uniform definition of a true parastomal hernia makes it difficult to determine the genuine incidence.¹² A bulge in the abdominal area could also be related to e.g. a subcutaneous prolapse where the fascia is intact but the prolapsed bowel lies subcutaneously (a sliding hernia) or excessive subcutaneous fat creating a bulge.¹³

Question #2

Does the risk for developing a peristomal bulge increase with age?

With age, our abdominal muscles become thinner and weaker and may not provide adequate support for the ostomy.¹⁴ This may explain the results of some retrospective studies, which found that a bulge e.g. parastomal hernia is more likely to occur in elderly people over 55 years of age.^{2,4,7,26}

Question #3

Can exercise or heavy lifting increase the risk for developing peristomal bulges or parastomal hernias?

Standard of care recommends nurses to advise patients against lifting and stretching as this may cause damage and discomfort.¹⁵ However, no studies have found the association between exercise or heavy lifting and development of a parastomal hernia, and there is a lack of evidence supporting the idea¹⁶ that specific restrictions prevent hernia formation.

Question #4

Does exercise and/or support garments prevent the development of a peristomal bulge?

Three studies have shown that the combination of exercise, support garments and recommendations regarding heavy lifting might reduce the incidence of parastomal hernias.¹⁷⁻²⁰ However, no studies showed that exercise or support garments alone reduce the incidence of parastomal hernias.

Question #5

Does the site of the ostomy influence the risk for parastomal hernias?

There is good reason for bringing the bowel through the rectus muscle; it is the most stable site for providing support for the ostomy¹² and for fitting the appliance to the skin.²¹ This is probably why there is near universal acceptance of the idea that an ostomy created through the rectus muscle also lowers the risk of herniation. However, there is no clear evidence to support that practice.^{3-4,7-8,18,22-25}

Question #6

Does bulging/a parastomal hernia lead to the ostomy becoming retracted or can it influence its shape or size?

A review paper states, that when a parastomal hernia develops the ostomy can become retracted. However, no evidence was provided.²⁶ When it comes to the ostomy shape or size, studies showed that bulging/parastomal hernia may be associated with an increase in the ostomy diameter (aperture size).²⁷

Question #7

Does new and improved surgical techniques prevent peristomal hernias?

Even though newer surgical techniques and synthetic prosthetic mesh materials might have reduced recurrence rate, the recurrence rate is still up to 22%.²⁸ It is still to be documented if laparoscopic surgical techniques will change the incidence of outward peristomal body profiles including bulges and parastomal hernias.

Source: ¹Ostomy Life Study 2015/16 Review; ²Ripoche et al., 2011, J Visc Surg; ³Leong et al., 1994, BJS; ⁴Londono-Schimmer et al., 1994, Dis Colon Rectum; ⁵Moreno-Mathias et al., 2009, Colorectal Dis; ⁶van Dijk et al., 2015, World J Surg; ⁷Pilgrim et al., 2010, Dis Colon Rectum; ⁸Williams et al., 1990, Br J Surg; ⁹Glasgow and Dharmajan, 2016 Clin Colon Rectum; ¹⁰Roussel, 2012, J Visc Surg; ¹¹Gurmu et al., 2011, Int J Colorectal Dis; ¹²Israelsson, 2005, World J Surg; ¹³Rubin, 2004, Intestinal Stomas: Principals, Techniques and Management; ¹⁴Williams, 2003, ia Journal; ¹⁵Kane et al., 2004, Nurs Stand; ¹⁶Pommergaard et al., 2014, Hernia; ¹⁷North, 2014, Br J Nurs; ¹⁸Thompson and Trainor, 2005, GIN; ¹⁹Thompson and Trainor, 2007, GIN; ²⁰Varma, 2009, Br J Nurs; ²¹Shellito, 1998, Dis Colon Rectum; ²²Sjödahl et al., 1988, Br J Surg; ²³Eldrup et al., 1982, Ugeskr Laeger; ²⁴Hardt et al., 2013, Cochrane Database Syst Rev; ²⁵Hardt et al., 2015, Colorectal Dis; ²⁶Burch, 2010, Br J Nurs; ²⁷Hong et al., 2012, JKSS; ²⁸Nagy et al., 2004, Zentralbl Chir.



Want to learn more?

The aim of the Ostomy Life Study is to raise awareness about important aspects of ostomy care by sharing empirical data, clinical insights and inspiring trends in order to improve the standard of care.

To get more insights from the Ostomy Life Study, go to <https://www.coloplast.com/OLS>.