

Parastomal Hernia

Lee Gavegan

Stomal Therapy Nurse
Ostomy NSW Ltd 2025

- This information is for educational purposes and please see your usual STN if you have any concerns.
- Any patient images have had patient consent for use for education.
- No one product / company is favored over another.

Disclaimer



AIMS & OBJECTIVES

Definition of a hernia / parastomal hernia
Look at recommendations from guidelines
Causes & prevention

“Herniae” = Latin word for rupture

Movement or exit of an organ or tissue through a wall of the cavity in which it lies.

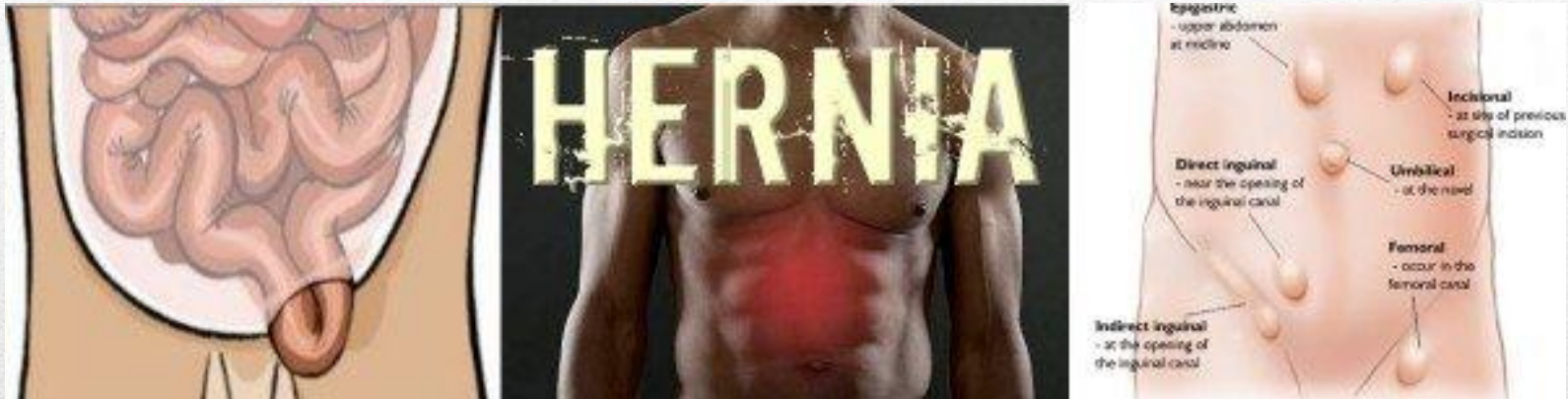
We immediately think of bowel or intestine

“parastomal hernia – an abnormal protrusion of the contents of the abdominal cavity through the abdominal wall defect created during placement of a colostomy, ileostomy, or ileal conduit stoma.”

Parastomal
Hernia Prevention, Assessment, and Management:
Canadian Best Practice Recommendations, May 2023

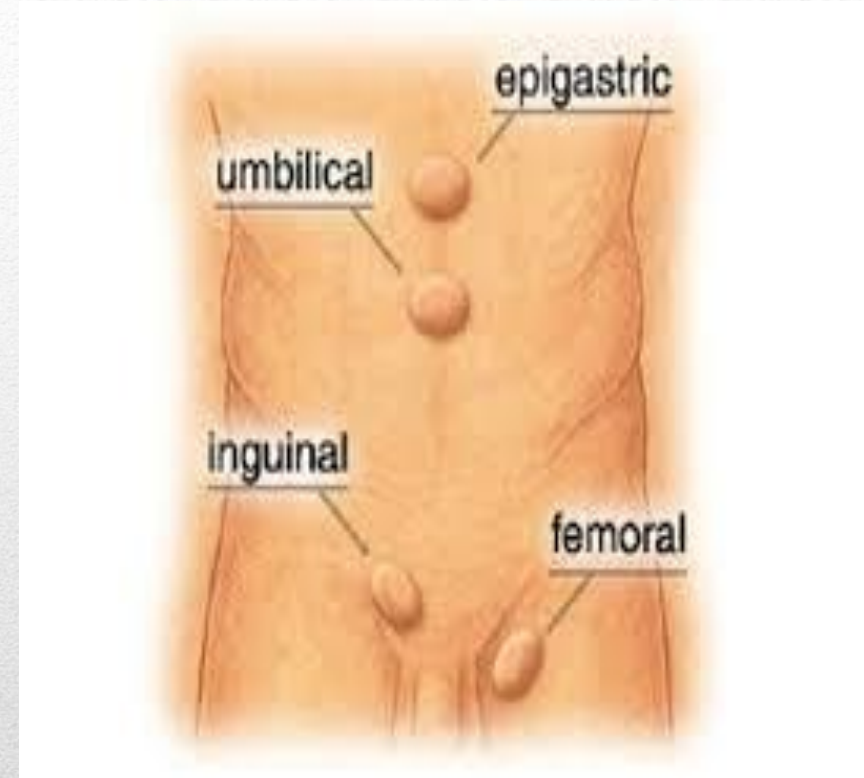


What is a hernia?

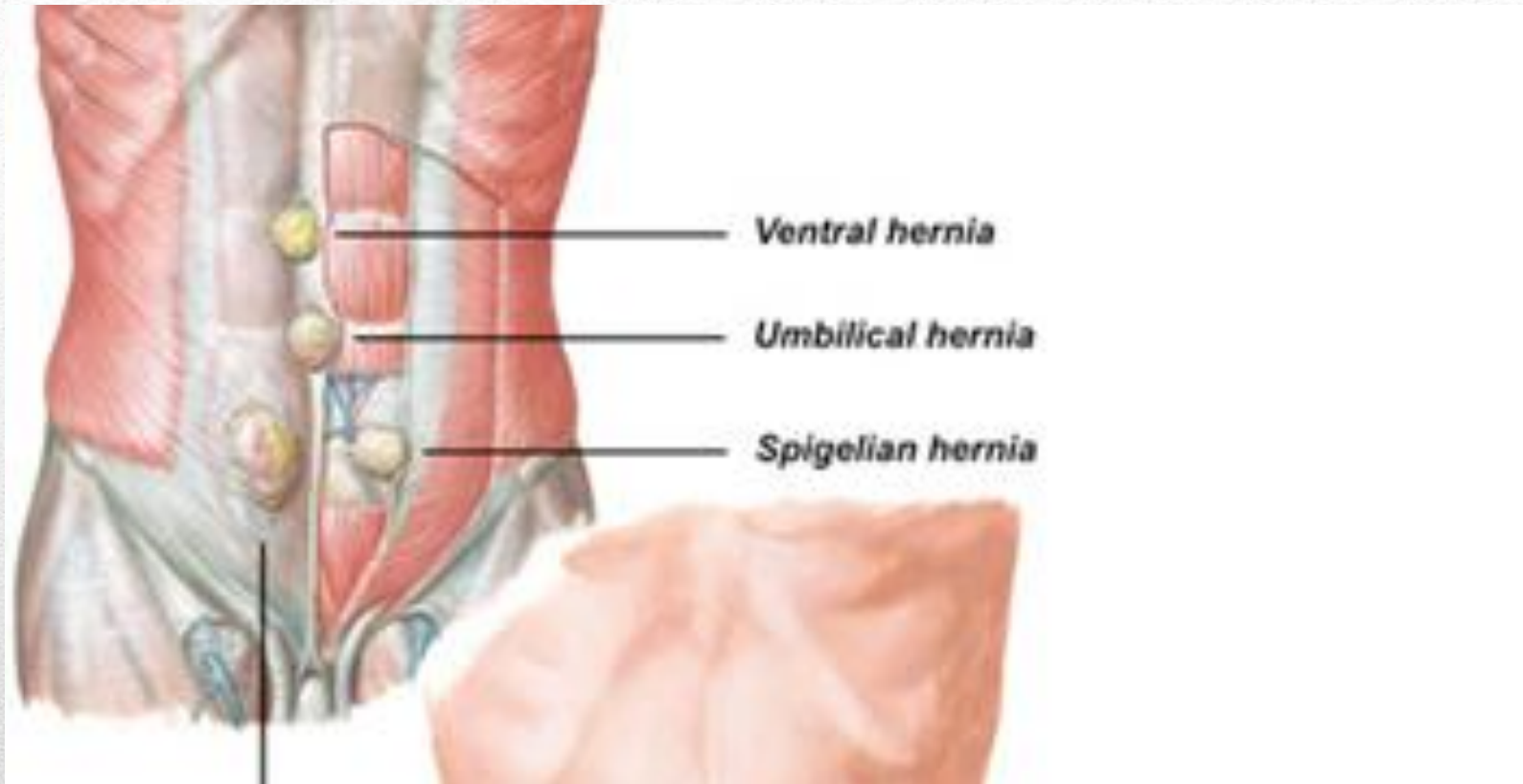


Inguinal hernia

- hiatus hernia
- umbilical
- epigastric
- femoral
- inguinal
- healed or healing wounds
- / incisional
- diaphragmatic
- herniated disc (back)

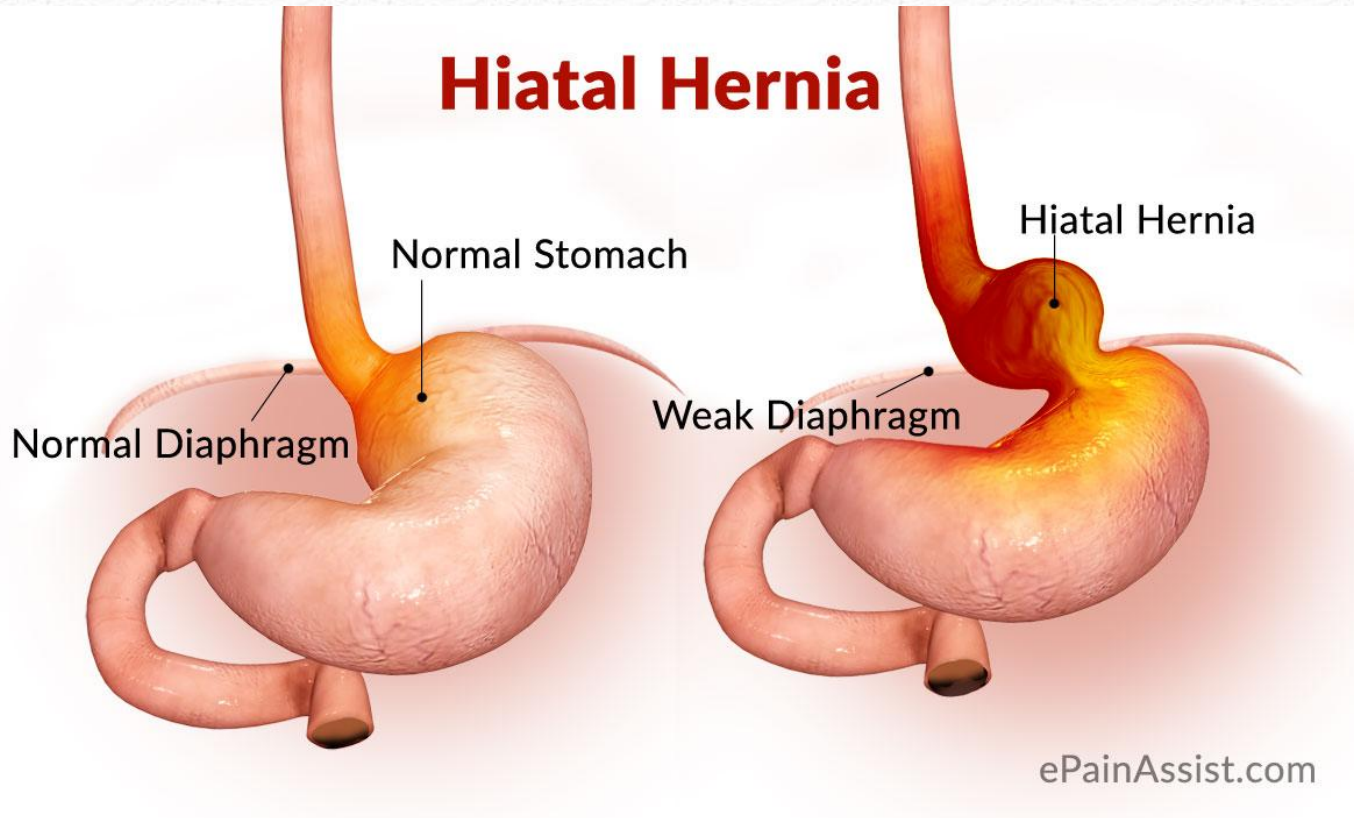


Common & uncommon hernia sites



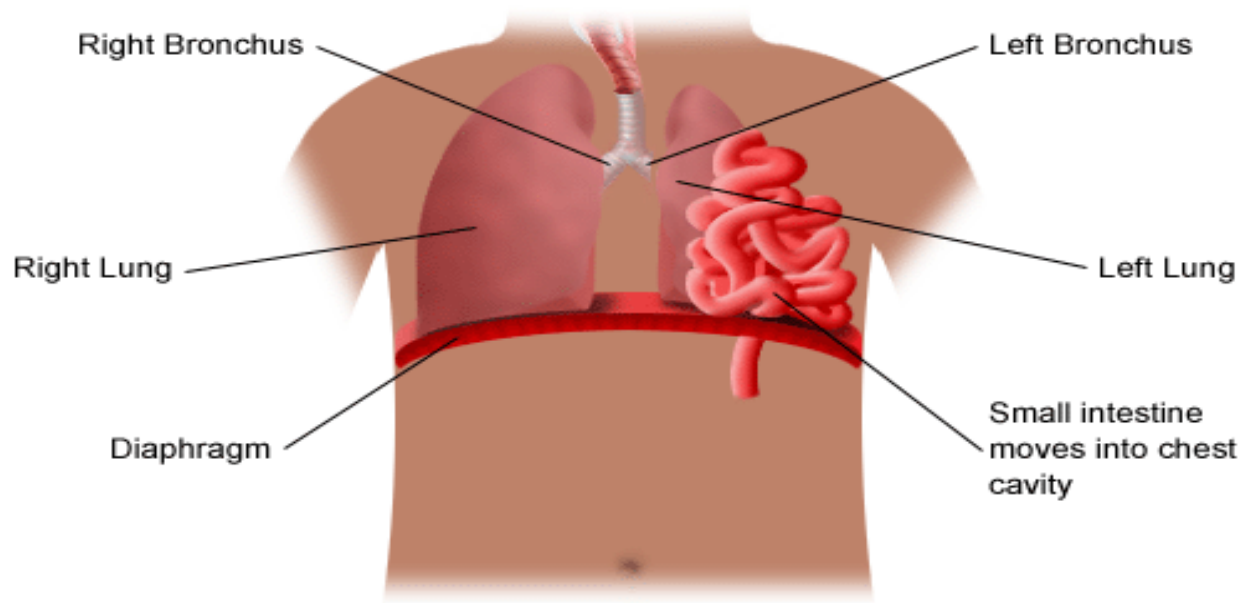
Common sites

Hiatal Hernia



Hiatus hernia

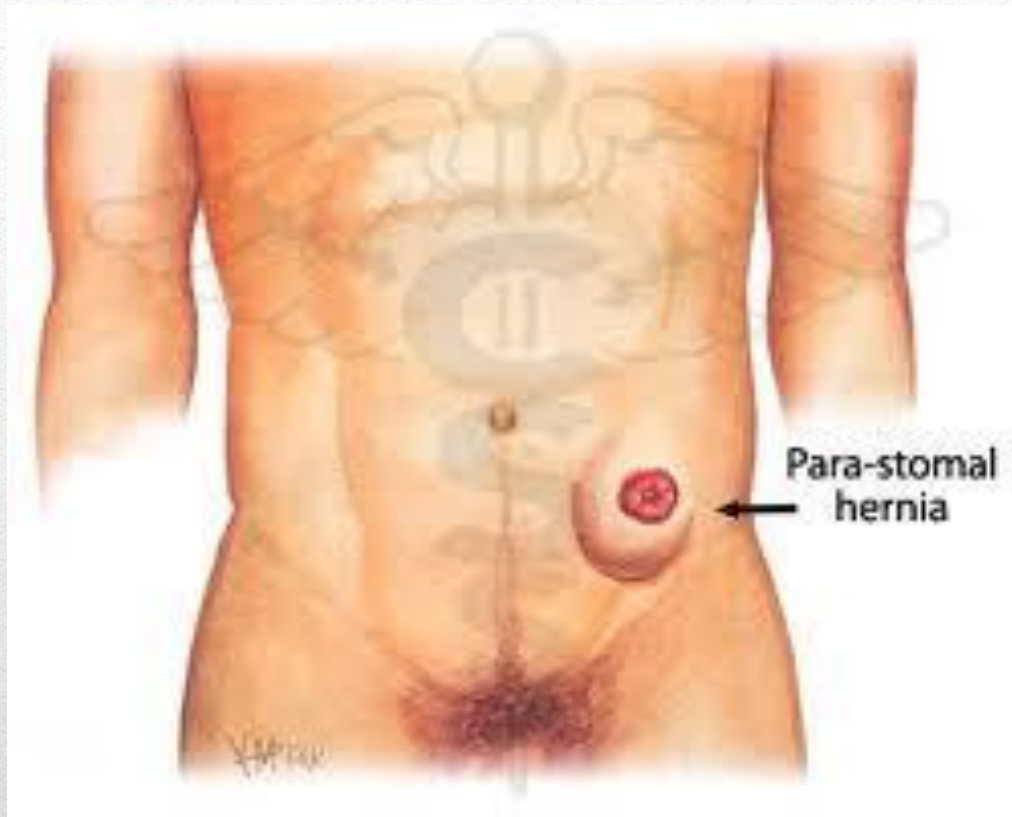
Congenital Diaphragmatic Hernia



Diaphragmatic Hernia



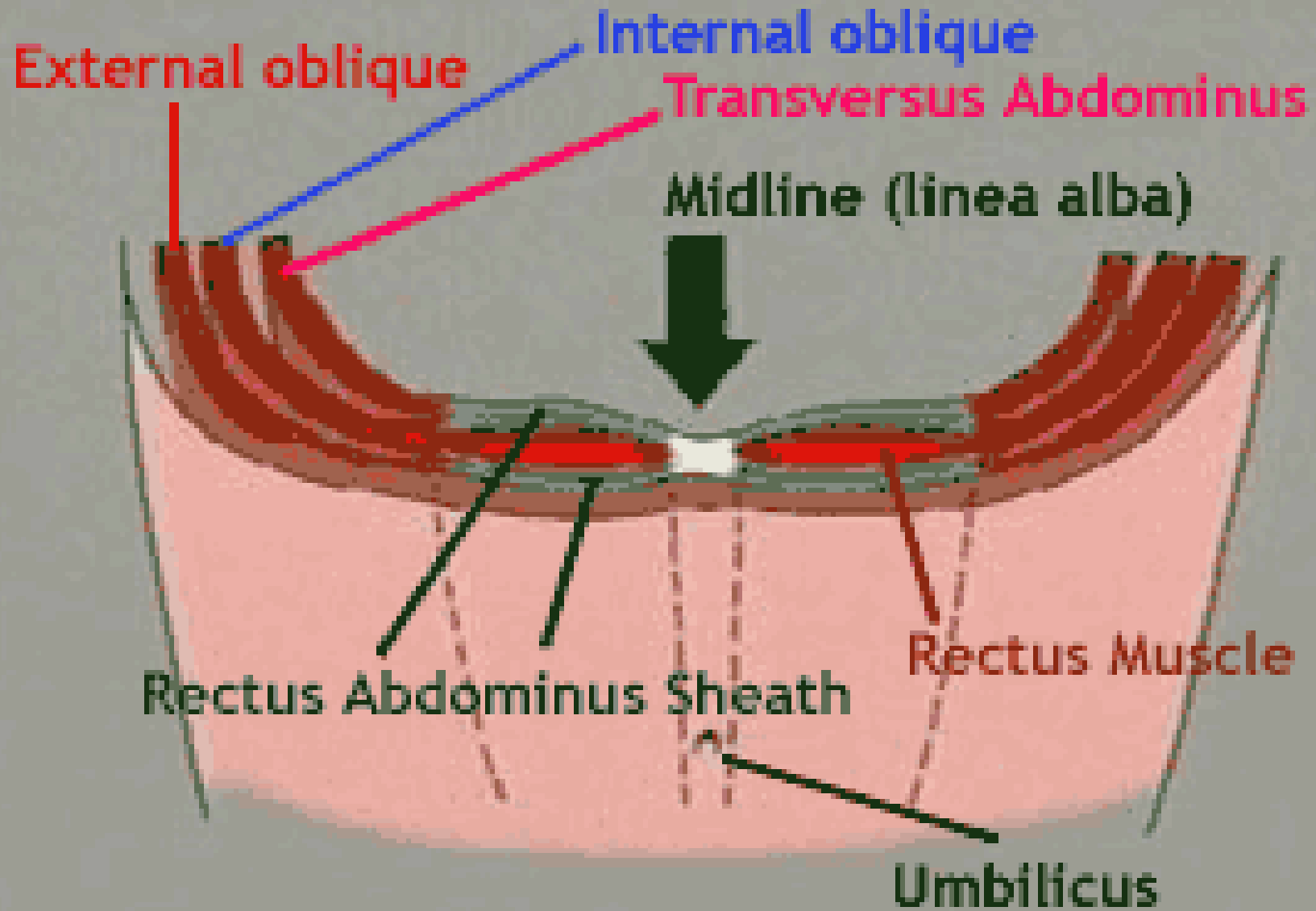
Hernias happen !

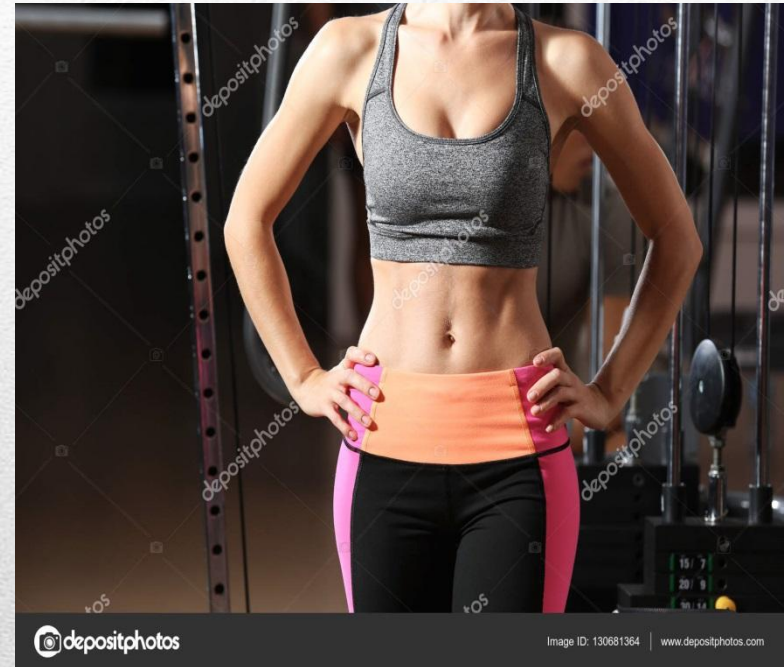
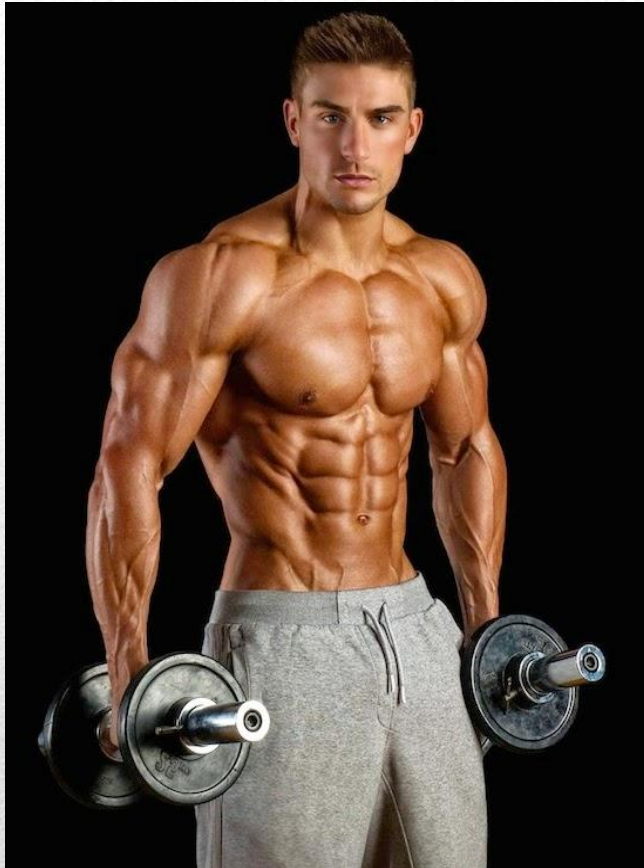


Parastomal Hernia

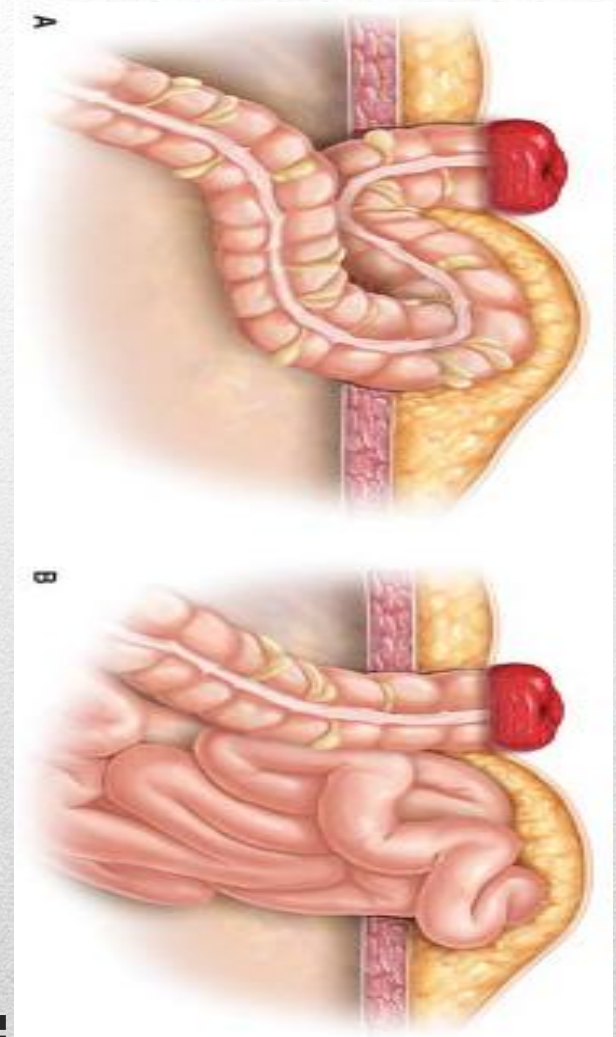
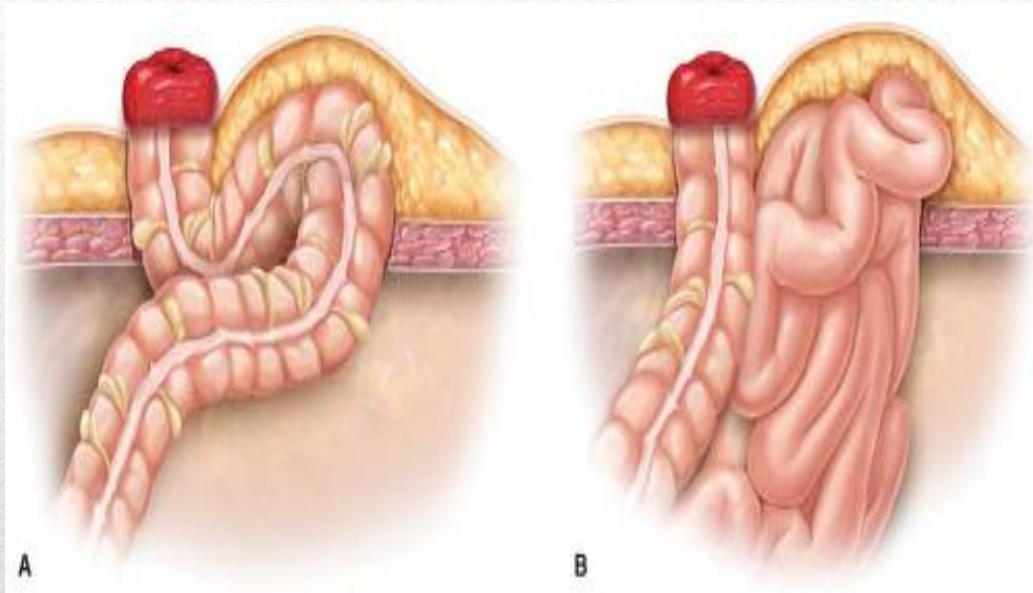
- Loop Ileostomy 0 - 6.2 %
- Loop colostomy 0 - 30.8%
- End ileostomy 1.8 -28.3 %
- End colostomy 4 - 48.1% McGrath et al 2007
- Urostomy 5 - 28% Osborne et al 2018
- ? What about dual stomas

Incidence by type of stoma





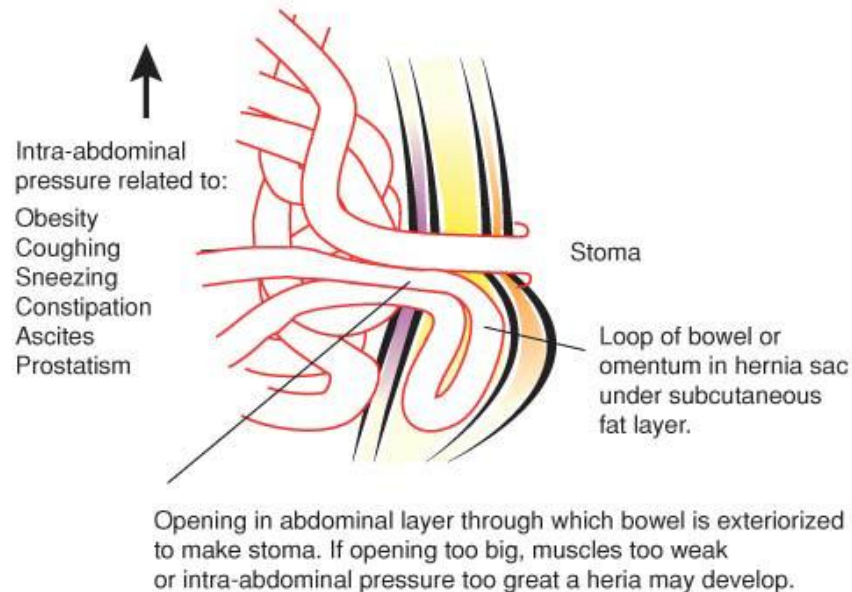
Six pack



Parastomal hernia

4

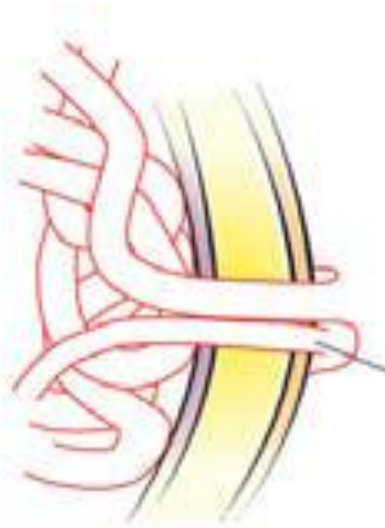
DEVELOPMENT OF SUBCUTANEOUS HERNIA



Subtypes

5

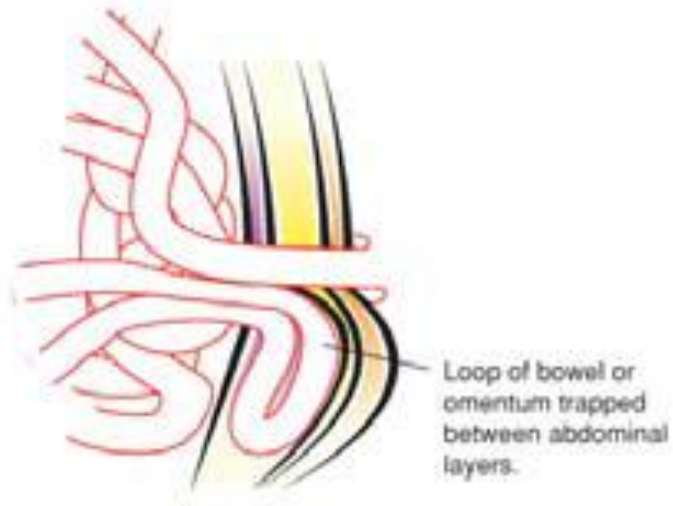
INTRASTOMAL HERNIA



In a spout ileostomy a loop of bowel may herniate up beside the ileum and be trapped beneath the everted layers of stoma. This has potential to prolapse if too much pressure.

6

INTERSTITIAL HERNIA



- Reports vary 25 – **50%** parastomal hernia (Thompson and Trainor 2005; Donohue et al 2014)
- 2020 true incidence not known
- **1/4** of patients developed a parastomal hernia within **one** year of surgery (Thompson and Trainor 2005)
- Prevalence estimated 25-30% @ 12 months
- **1/4** or 26% of respondents to an online survey (10 000 people surveyed & only 2631 responded) reported having had a medically confirmed parastomal hernia (Russell 2017)
- **58%** patients reported a parastomal hernia in another study (only 28% of surveys returned) (Cowan and Redmond 2012)
- Russell, S 2020 Parastomal hernia: improving quality of life, restoring confidence and reducing fear. The importance of the role of the stoma nurse specialist. WCETVol 40 (4) December 36-39

Incidence

- *“The incidence of developing a parastomal hernia has been reported to be as high as **81%** and is frequently associated with other stoma-related complications. It affects the quality of life and increases financial costs in the health care system.”* Parastomal Hernia Prevention, Assessment, and Management: Canadian Best Practice Recommendations, P6 May 2023

- **Acute Parastomal Hernia Presentations: A 10-year Review of Management and Outcomes**

- Gilmore A et al 2024 Original Research Journal of Abdominal Wall Surgery

- Conclusion:

- Acute PSH usually requires operative intervention
- Recurrence rates are considerable
- Approach to PSH in acute setting needs to be individualised
- More study needed to develop guidelines

- ACUTE = pain – life threatening incarceration

Paucity info on optimal management

- May 2013-May 2023
- 22 admissions acute PSH
- Av. 77 yrs
- 14 males on presentation
- Charlson score comorbidity 5
- 12 pt had stoma due to malignancy
- 10 end colostomy
- 11 previous PSH repairs
- 13 had op on presentation
- 4 required SB resection
- 4 had stoma resection
- 4 stoma relocation
- 5 recurrences of PSH on follow up
- 9 managed non-operatively & 7 then went to have elective reconstruction

2024 Literature

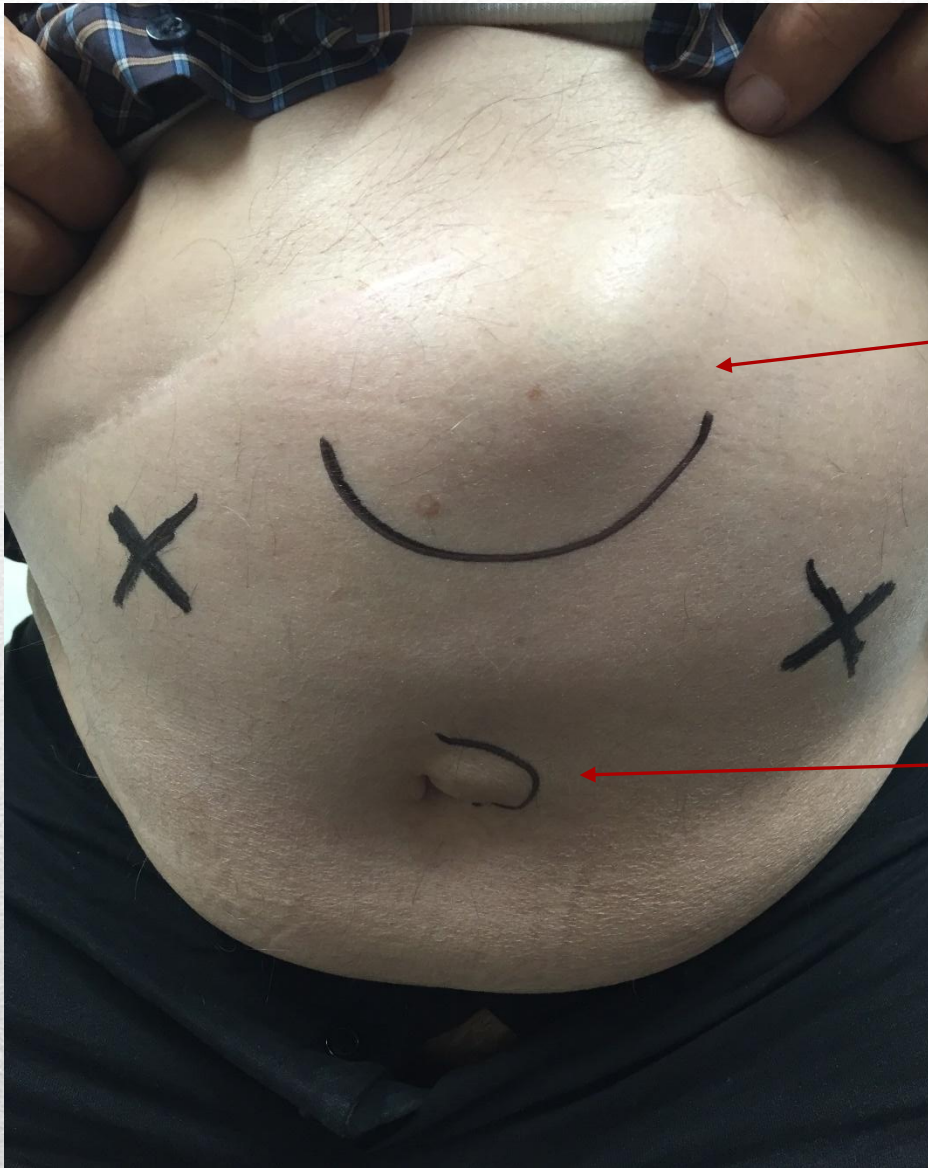
- Any condition that increases the pressure of the abdominal cavity may contribute to the formation or worsening of a hernia
- age prem v's older?
- obesity, malnutrition
- heavy lifting, heavy exercise
- straining during a bowel movement or urination,
- smoking (x4 > risk), chronic lung disease, coughing, sneezing
- fluid in the abdominal cavity, post-operative haematoma – blood clot
- childbirth
- pregnancy
- medications e.g., steroids
- congenital connective tissue diseases – Ehlers-Danlos Syndrome(EDS)
- malignancy
- dual stomas
- laparoscopic v's open surgery

Causes of a hernia

- New lump
- Painless lump → severely painful
- Tender, swollen bulge of tissue that you are unable to push back into the abdomen
- Abdominal or pelvic pain can be part of the symptoms of many hernias.
- Sometimes pain precedes lump formation
- Lump increases in size when standing & sitting
- May be worse at the end of the day, feel heavier, “dragging”
- Difficulty getting appliances to remain intact
- Skin, tight, thin & cracked or peeling
- Negative impact on life – difficulty managing activities
- Shape difficult to hide under clothing
- Altered physical shape and self image

Signs & symptoms

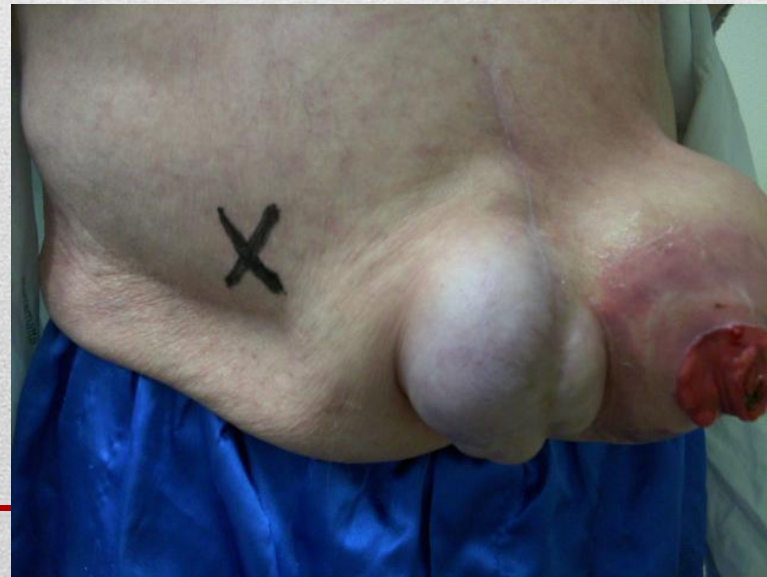




Incisional
hernia

Umbilical
hernia

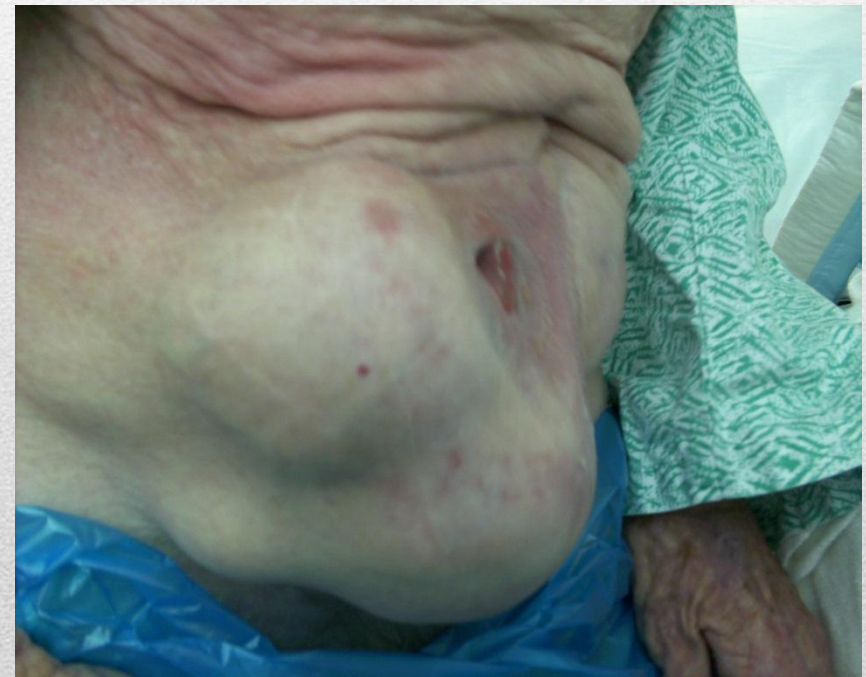
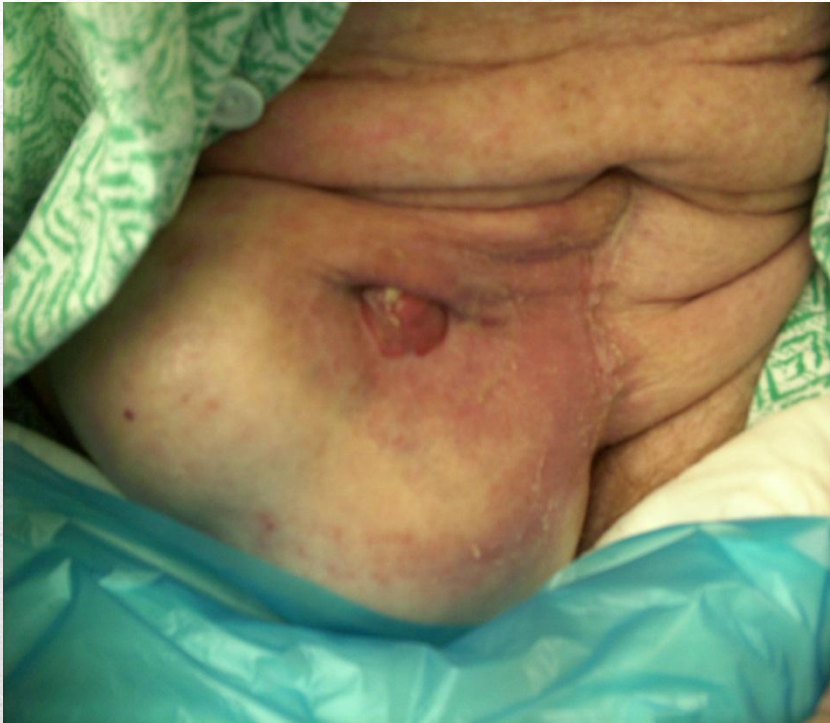






- STN
- GP
- Surgeon
- Ostomy Association
- Company
- Take a picture & email or text it to someone you have spoken with
- Severe pain seek emergency help

What do I do?





- Measure, discuss, review & fit garment
- Obtain one first to see if correct sizing & comfortable
- Then order another so one can be in the wash & one worn.
- Available in many colours, sizes & strengths
- No hole in garment necessary (North & Osbourne 2017)
- If wearing a support garment long term then review at least yearly
- Advise about exercise & diet
- Referral to other services



STN role

- Guidelines (UK) advised **no heavy lifting for 3 months**
- 3 monthly review STN commence;
 - 1) *Education* – risks parastomal hernia
 - 2) *Measure* - support garment to wear when undertaking heavy lifting
 - 3) *Teach* patients abdominal exercises – to be done daily for 9 months
- 6 & 9 month F/U for STN R/V program & education (Thompson & Trainor 2005)
- Northern Irish study strong abdominal muscles + regular exercise less likely to develop parastomal hernia
- me+™ recovery YouTube
- 3 phases: **Green**= foundation, **Blue** = Making progress, **Purple** = progression
- Exercise physiologist + GP ok

Exercise



**NOTHING SAYS
I ❤️ YOU**



**LIKE HANGING OUT
THE WASHING FOR HER.**

What a keeper....



EXERCISES WITH AN OSTOMY



Abs are fabs!!!!

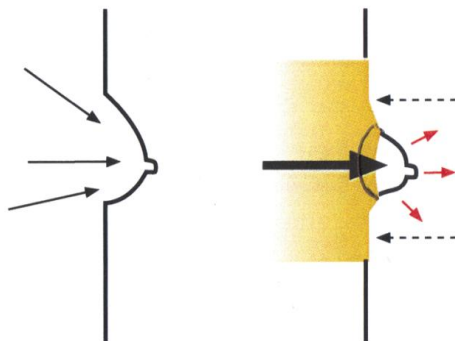
- Maintain a healthy diet.
- Maintain regular bowel pattern
- Avoid constipation (straining / pushing)
- Avoid straining with urination



Diet

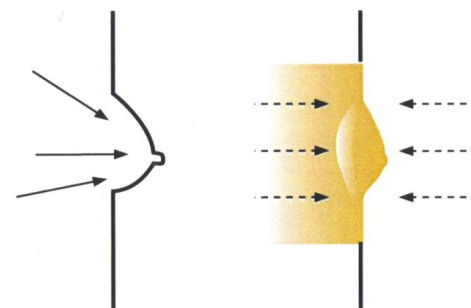
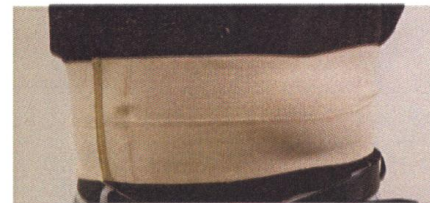


Support garments



Belt with a hole:

Pressure behind hernia focussed at the hole forcing hernia/stoma outward.



Full support belt:

Covers stoma/hernia completely and balances inward and outward pressure. Flexible material and proper adjustment allows the stoma to function normally under full support.

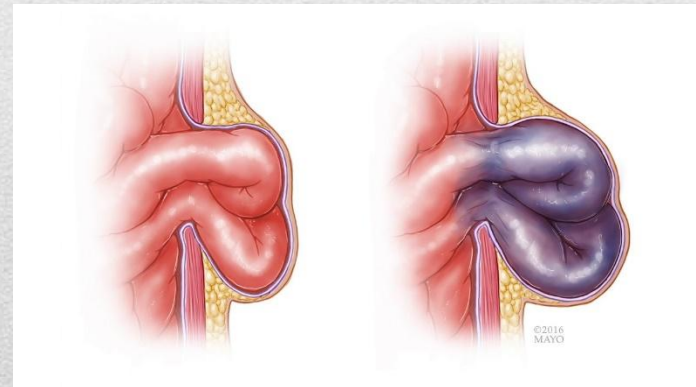
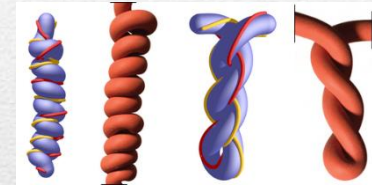
Hole or no hole?

“History of previous surgery for hernia repair is considered to be a significant predictor for parastomal hernia development”

Parastomal Hernia

Prevention, Assessment, and Management: Canadian Best Practice Recommendations, P12, May 2023

- Occlusion
- Twisted
- Compressed
- ↓ blood supply
- Strangulated
- EMERGENCY



What to be aware of?

- Shape change, aesthetically embarrassing
- Stoma inactive for a number of days and...
- ↑ pain ? strangulation or obstruction.
- Poor colostomy irrigation result
- Management problems.
- Psychological distress.



When to be concerned?

- ✓ “Watchful Waiting” = conservative no surgical intervention for a patient with no or minimal symptoms
- ✓ Surgical repair when conservative measures are not successful
- ✓ Laparoscopic +/- robotic or open

Three surgical alternatives;

- Stoma Relocation
- Repair of hernia
- Repair of hernia with Sheet (s) - Mesh
- Patches
- Plug
-

Management Options

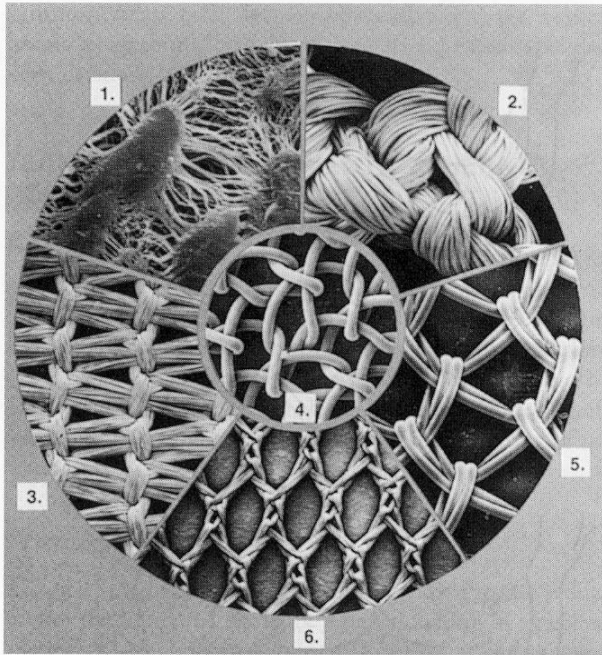
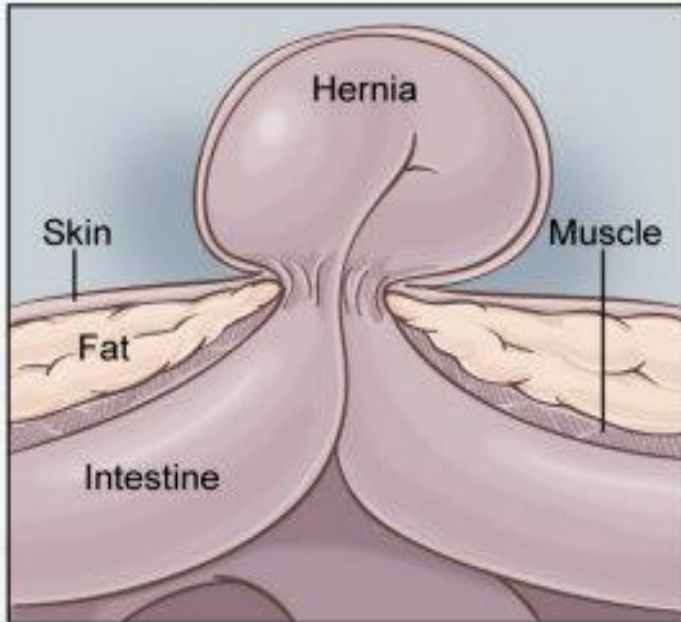


FIGURE 47.3. Scanning electron micrographs of 1, Gore-Tex (original magnification $\times 1,110$); 2, Teflon mesh (E.I. du Pont de Nemours) ($\times 35$); 3, Surgipro ($\times 17$); 4, Marlex ($\times 17$); 5, Prolene ($\times 17$); and 6, Mersilene (Ethicon, Somerville, NJ) ($\times 17$). (From Amid P, Schulman A, Lichtenstein I, et al. Biomaterials for abdominal wall hernia surgery and principles of their applications. *Langenbecks Arch Chir* 1994;379:168–171, with permission.)

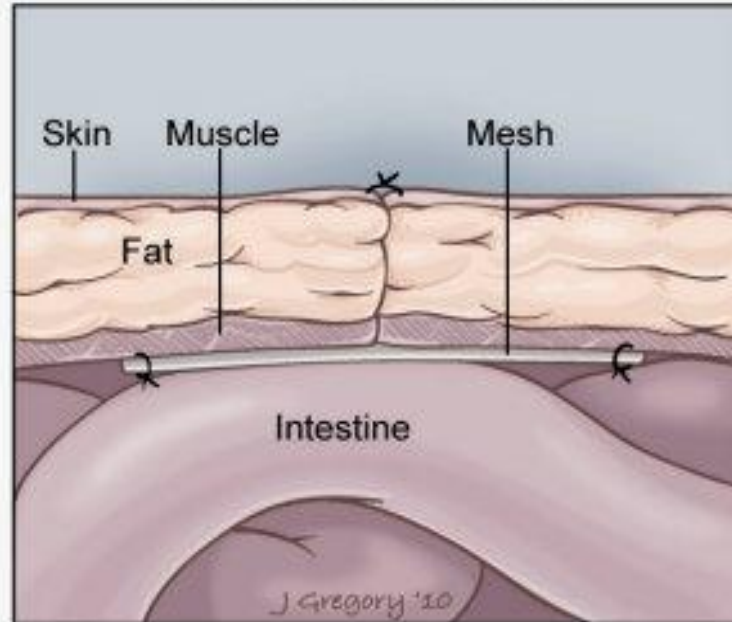
- 1. Gore-Tex
- 2. Teflon
- 3. Surgipro
- 4. Marlex
- 5. Prolene
- 6. Mersilene

Types of mesh

Typical Hernia



After Repair with Mesh



Hernia repair

to suit your lifestyle

3 MODERATE SUPPORT

SUITABLE FOR:

- After surgery
- Wear during light exercise
- To help prevent or to support a small bulge

KomfortLite Support Belts
Men's Support Pants
Diamond Plus Briefs & Boxers
Diamond Plus Support Waistband

4 INTERMEDIATE SUPPORT

SUITABLE FOR:

- Wear during daily activities to help prevention (housework, shopping, golfing)
- Support a more developed hernia

Support Briefs for Her
IsoFlex Support Belts

5 FIRM SUPPORT

SUITABLE FOR:

- Wear during active work or sports to help prevention
- Support a more developed hernia

Total Control Support Belts
KoolKnit Support Belts

Your SAS
Allowance
per calendar
year



BELTS

You can now
purchase an
unlimited number of
pants directly from
Omnigon or your
Association. Simply
call 1800 819 279

Stoma scheme changes

- 1. An ostomate should be referred to a STN
- 2. An individual planning ostomy surgery should receive a comprehensive parastomal hernia risk
- 3. A health professional should provide an ostomate with ongoing individual information related to parastomal hernia prevention
- 4. Patients planning surgery involving an ostomy should be seen for pre-op site marking
- 5. Pre- operative & post- op discussion should be had about parastomal prevention
- 6. Ostomates should receive written and verbal information about exercise, movement, core muscle training
- 7. Individual with a parastomal hernias should be referred to a physio or exercise physiologist.
- 8. Individual with an ostomy should be assessed to determine level of support garment / belt for prevention & management of parastomal hernia considering lifestyle, activities
- 9. An ostomate with a suspected parastomal hernia must have this diagnosed with GP or surgeon.
- 10. Assessment should happen regularly in sitting, standing & lying positions to determine size & severity of the parastomal hernia
- 11. People with a parastomal hernia should have the stoma size and peristomal skin assessed regularly to ensure pouching system is suitable
- 12. STN should document the individual's stoma, hernia, & peristomal skin assessment in the medical record.
- 13. Identified persons with a parastomal hernia should be referred to a surgeon or GP to discuss role, benefits of surgical repair
- 14. Individual assessment of someone with a parastomal hernia should be important to look at the impact on health-related QOL, body image, and follow up with consideration of psychosocial needs
- 15. Further research is required into gaining a greater understanding of risk factors, prevention & management for parastomal hernias.

Recommendations-2023





- Parastomal Hernia Prevention, Assessment, and Management: Canadian Best Practice Recommendations *May 2023*
- Sarah Russel's new website
- <https://www.theostomystudio.co.uk/about>
- Acute Parastomal Hernia Presentations: A 10 – Year Review of Management and Outcomes
Journal of Abdominal Wall Surgery 2024 Nov Vol3 Article 13364 pg. 1-7

References

