

Parastomal Hernia identifying your potential risks

Wendy Osborne (QN; MSc Advanced Nursing Practice)

Specialist in Stoma Care Nursing
Clinical Governance Lead – Coloplast Ltd

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What will I cover today ?

- What is a parastomal hernia ?
- Causes & risk factors
- Seeking evidence to support information
- Future research

Please note: I do have some photographs within this presentation





What is a hernia?

- Most common complication after stoma formation
- A hernia is a weakness in the wall of the abdomen
- It allows the bowel to push out against the wall of the abdomen creating a bulge/mound or lump by the stoma.

In view of the surgical technique to create a stoma “a Surgeon comments”

Some degree of herniation around a stoma is so common; that this complication may be regarded as inevitable.

How do you know if you have a hernia ?

- Change in tummy shape – a bulge or swelling around / above / below the stoma
- Aching or dragging feeling around the stoma
- Change in shape of your stoma
- Difficulty in changing/managing pouch

And they can significantly vary in size and shape



**Unfortunately;
we do not
know what the
true incidence is ?**

10-50% Raymond and Abulafi (2002)

16% Arumugam et al (2003)

28% Thompson and Trainor (2005)

33% Pilgrim et al (2010)

38% Sohn et al (2012)

46% Soomre et al (2022) (4 yr study B'ham; 163 pts)

The Association of Stoma Care Nurses (ASCNUK) project group initiated



“ To develop evidenced based guidelines
with the intention of improving patient
outcomes

&

Identify practice to reduce the
development of parastomal hernia’s”

Background of Parastomal Hernia Project

- Development of ASCN UK Parastomal Hernia (PSH) guidelines 2018
- Parastomal hernia workshops
- Hernia support (Risk Assessment) tool pilot
- Project group – What can we do as Stoma Care Nurse Specialists to mitigate risk and contribute to the prevention of PSH
- Update of literature review
- Development of risk and lifestyle assessment form

Parastomal hernia development is the highest stomal complication (North 2014). We as SCNs have a responsibility to advise our patients of the risk factors.

All patients with a stoma are at a lifelong risk of developing a parastomal hernia due to the surgical defect created within the abdominal wall. The need to identify risk factors to advise and educate patients about this is essential.

It is recommended that these risk factors are re-assessed and discussed on every clinical assessment.

Predisposing consideration	RISK Factors	Additional information/ explanation	Reference
Age	Children The over 70	Rectus muscle underdeveloped in paediatrics. Rectus muscle gets weaker as collagen reduces with age	Thompson (2008)
BMI (Appendix 3a (ii))	Obese	Undue strain and force on rectus abdominis	McGrath/Porrett (2006) Thompson (2008)
Occupation/ lifestyle	Manual Young family	Undue strain and force on rectus abdominis	
Activity 1-5 1 lie on sofa - 5 gym/sport every day	Sports - e.g. weight lifting	Undue strain and force on rectus abdominis	Kane et al (2004)
Surgery	Emergency Post op infection Multiple abdominal surgery Malnutrition	Risk of infection, larger aperture of stoma with emergency surgery Deficiency in iron, selenium, zinc	Bucknel & Ellis (1982) Bucknel & Ellis (1984) McGrath/Porrett (2006) Pearl (1989) Pilgrim et al (2010)
Stoma - site	Transverse colostomy Colostomy Out of rectus muscle Previous hernia repair Surgical technique (trephine/ aperture of stoma greater than 35mm/X incision)	Research currently indicates higher risk in colostomist Incidence reduced if within rectus muscle Implications of abnormal collagen and PMH of herniosis Likelihood of recurrence	McGrath/Porrett (2006) Carne et al (2003) Cowin & Redmond (2012) Pilgrim et al (2010)
Diagnosis/ PMH	Malignancy Diverticular Existing Hernia Previous Hernia AAA Connective tissue disorders Steroids Diabetes	Diverticular/AAA/hernia – suggest abnormal collagen as a result of genetic make up could be contributing to history of herniosis. Non-specific collagen Steroids/diabetes impair healing	Muysoms et al (2009) Hernia (Springerlink.com) RC Read (2011) Readding (2014) Pilgrim et al (2010)
Smoking	Smoker	4 x greater risk of PSH in smokers	McGrath/Porrett (2006)
Raised intra abdominal pressure	COPD/emphysema Ascites Acute/chronic constipation (colostomists/urostomist)	Persistent coughing/forceful sneezing/vomiting leads to undue strain within the abdomen Risk of constipation post operatively due to poor fluid intake secondary to the change in absorption and alterations in renal function acutely or long term	Thompson (2008) Readding (2014)

Predisposing factors



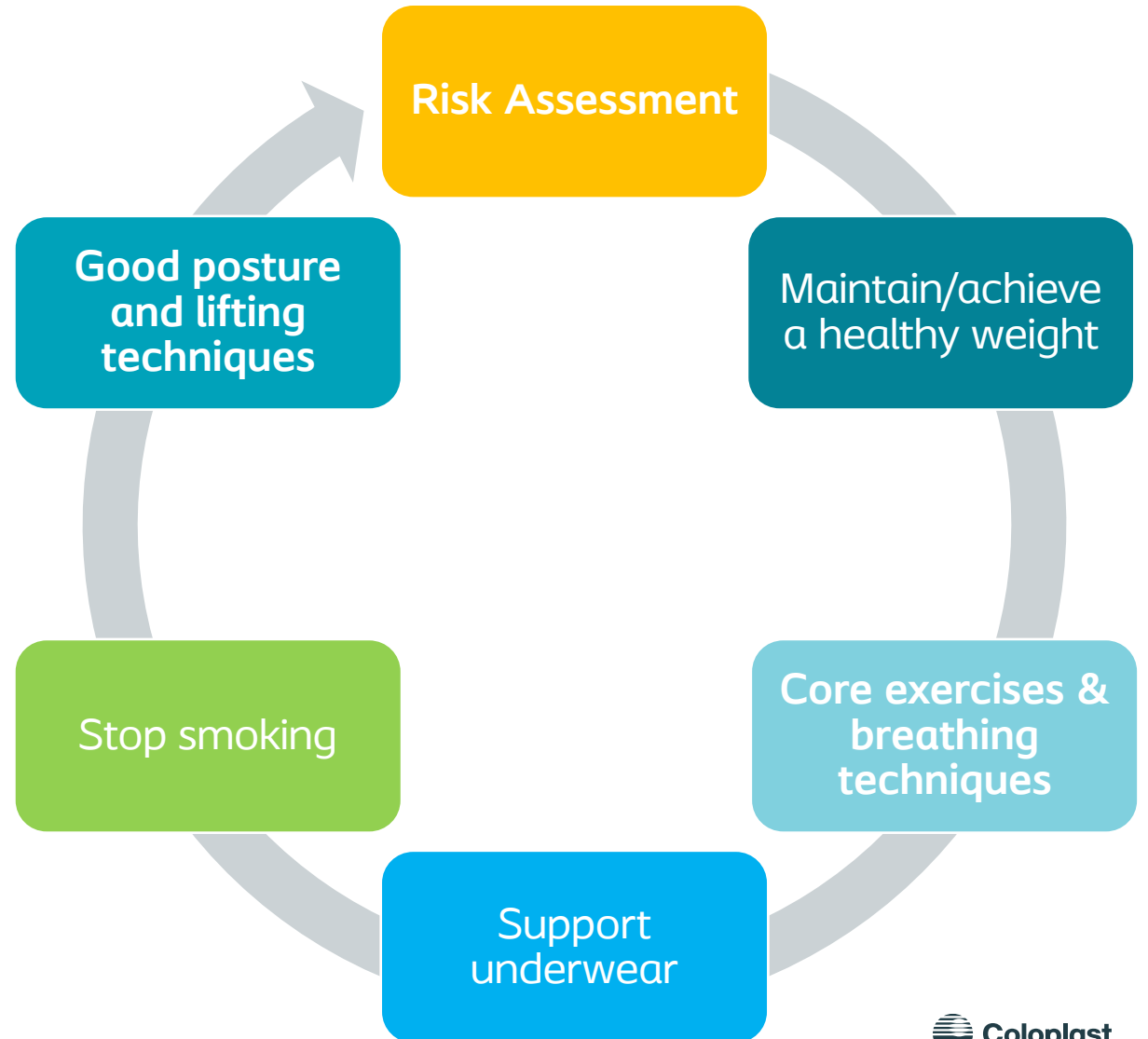
Assessing the risk

There are many factors that contribute to a hernia developing ?

- History of hernia's
- Surgical procedure
 - Diagnosis
 - Type and size of stoma
 - Emergency surgery
 - Sepsis
 - Steroids
- Time
- Elderly
- Smoking
- Straining - Poor lifting techniques
- Obesity
- Sudden increase in abdominal pressure
 - Coughing / sneezing
 - Strenuous activities

**Provision of
Information**

**Reducing /
mitigating
the risks**



Parastomal hernia lifestyle review

Individual assessment and mitigating risk factors

- Develop a risk assessment tool to facilitate SCN's to undertake an individualised consultation that promotes tailored lifestyle education and mitigate parastomal hernia risk
- Increase engagement between patient & SCN through consent and collaborative discussion
 - Promote ownership by the patient as to what impact the risks are for them
- Provide guidance to capture and document the SCN assessment
 - Provide written evidence of completed assessment
 - Provide evidence of what information has been provided both written and verbal

Predisposing parastomal hernia risk	Risk factor	Value (Circle) 1 – low risk 2 – medium risk 3 – high risk	SCN Advice and recommendations	Supporting literature/APPs/ website info provided
Age	Age 5-15yrs 60yrs – 79yrs Over 80 years	1 2 3		
Gender	Female Male	2 1		
Waistline measurement	More than 100cm	3	Waist measurement taken at level of umbilicus	
Occupation/lifestyle Where lifting is undertaken without lifting equipment	Manual worker Carer (dependants cared for)	2 2	Are there lifting Risk assessments at work/home?	
Surgery/Stoma site	Emergency surgery Robotic / laparoscopic surgery Transverse colostomy Colostomy Stoma out of rectus muscle Trepine stoma Stoma circumference >35mm (3months post op) Post operative complications (ileus, sepsis) ?? Risk from length of time since surgery	3 2 3 2 2 2 3 3		
Diagnosis/co-morbidity	Malignancy Diverticular Previous hernia repair Existing hernia	2 2 2-3 2-3	Parastomal =3 other hernia = 2	

Predisposing consideration for parastomal hernia risk	Risk factor	Value (Circle)	Specific advice discussed with patient by assessing nurse	Supporting literature/APPs/ website info provided
Raised intra – abdominal pressure	COPD/Emphysema/Persistent cough	3		? Link for info sheet
	Ascites	2		
	Acute/chronic constipation (colo/uro)	2		
Medication	Steroids within 1 year of surgery	3		
	Steroids long term	1		
	Chemotherapy within 1 year of surgery	2		
	Pelvic radiotherapy	3		
Physical Activity / Hobbies	Irregular exercise/activity	2		Link for info sheet
	Physical activities which <u>suddenly lead to an increase in</u> intra abdominal pressure e.g. sports, gardening, DIY,	3		
	Structured and regular physical activity including core muscle engagement	-3		
Mood and motivation	Low and lethargic	2	Utilise local QOL score to assess and review	
Lifestyle habits	Smoker (no. smoked in day?)	3		
	Alcohol (regularly drinking >14 units a week)	3		
		Total		

Parastomal Hernia Risk Score:

Low risk : 0-15

High risk : 16 and above

Confirmation of risk reduction discussion with individual (please tick areas discussed)

	Y	N	N/A	Comments	Signature of Nurse / patient date
General advice in relation to overall risk of developing a parastomal hernia discussed					
Individualised parastomal hernia risk level as per above lifestyle review discussed <ul style="list-style-type: none"> Risk Score is Low / High 					
Confirmation of abdominal strengthening advice & literature provided in relation to: <ul style="list-style-type: none"> Breathing exercise Posture and abdominal (core) strengthening exercises demonstrated Movement and physical activities discussed Lifting and handling advice in accordance with daily activities / hobbies & sports discussed Supporting the abdomen – e.g when coughing / sneezing increases intra-abdominal pressure Confirmation of any local program involvement e.g. Physio pathways which include structured abdominal strengthening information 					
Underwear advice discussed <ul style="list-style-type: none"> High waisted underwear with light support (options of availability according to local policy/ICS) Firm support garment based on outcome of risk assessment and local policy 					
Lifestyle advice in relation to weight, smoking & alcohol (Advise to contact local services via GP surgery if required)					
Post surgery – (to provide relevant information literature and discuss) Early warning signs of how you would know if developing a parastomal hernia Awareness of changes in Body profile assessment Patient informed of PH changes to observe for Regular ongoing SCN review for Stoma & product assessment					

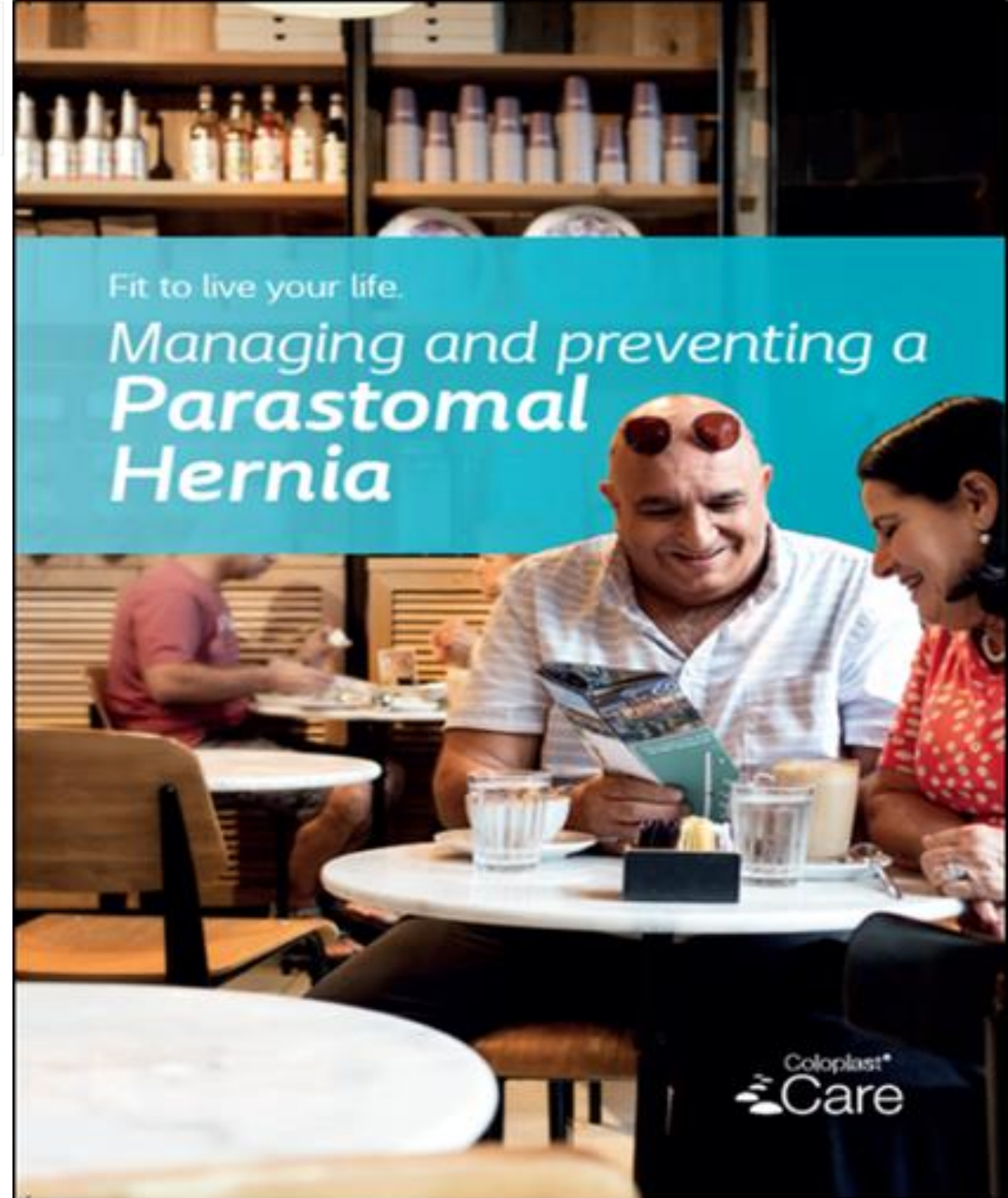
Please see ASCN UK parastomal hernia guidelines for further references and resources

The future



Prevention

- Individual lifestyle & wellbeing have a significant impact
- Ongoing research
 - Causes - genetics
 - Surgical advances
 - Post operative studies
- Support garment advancements and range



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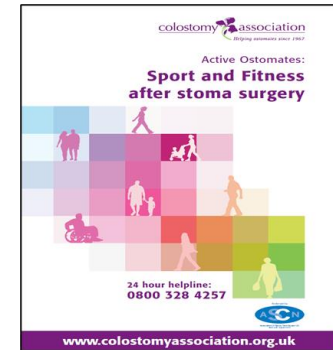
So what about support garments ?

Studies to date state they offer comfort & confidence

- There is no evidence that wearing a support garment on its own will reduce the risk of you developing a parastomal hernia
- Underwear with lycra / control or compression panels offer great support for your abdomen and the stoma
- Available from many high street department stores and the internet
- They offer support as well as provide comfort and discretion



What the studies
are telling us is that
core abdominal
exercises can make
a difference ?



HALT
Hernia Active Living Trial

We are looking for people to take part in our research

If you would like to take part, or wish to find out more, please contact a member of the research team for an informal discussion about what is involved:
Julie Munro Researcher - Julie.munro@uhl.ac.uk
Will Goodman Researcher - umwdg@leeds.ac.uk

 - Twitter @HALT_trial Please add us on twitter, or Private message us for further information.

Aim
Our aim is to see if our research can improve the quality of life for people living with a parastomal hernia or bulge around their stoma.

What will it involve?
You will receive support from a clinical exercise specialist to perform a series of movements and exercises for 12 weeks to improve the control and movement in your abdominal region. The support will be by telephone and video conferencing (e.g. skype, Zoom). You will also receive a booklet with illustrations of the different exercises and video clips demonstrating the exercises.

Are you eligible*?
*Do you have a bulge around your stoma or have you been diagnosed with a parastomal hernia?
*Are you over 16 years old and live in the UK?
*Has it been more than 3 months since you had your stoma surgery?

*if you have had a previous hernia repair or are already doing some core-training then you MIGHT not be eligible to take part. Please contact the research team to discuss.
NOTE: You will need to be able to receive video conferencing calls through your computer, tablet or mobile device.



Working together to:

- Build the evidence
- Standardise clinical practice
- Improve outcomes for people living with a stoma



Live your life – do all the things you are wanting to do



Thank you_