Managing Bowel Function after Colorectal Cancer Treatment

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NGH
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Aims

* To explain Low anterior resection surgery
* To identify the symptoms of low anterior resection syndrome
* To understand why this may occur
* To be aware of the management techniques used for low anterior resection syndrome
Low anterior resection/ total mesorectal excision
LOW ANTERIOR RESECTION WITH TME
Rectal Anatomy

- High Anterior Resection
- Low Anterior Resection
- Ultralow Anterior Resection
- Abdominoperineal Resection

15 cm
A temporary loop ileostomy

14,000 patients treated for rectal cancer in UK

65% underwent an anterior resection

of these > 50% of these patients will have a temporary stoma formed.
Prior to stoma reversal

- May be 3-12 months before reversal depending on treatment
- Water soluble enema to check anastomosis healed.
- Patient information
  - Preparing patient for bowel function not returning to ‘normal’.
  - Anal sphincter exercises.
  - Information to help manage symptoms
Low anterior resection syndrome

‘Disordered bowel function after rectal resection, leading to a detriment in quality of life.’ (Bryant et al. 2012)
Anterior resection syndrome

Cluster of symptoms
- Urgency
- Frequency
- Loose stools
- Incomplete evacuation
- Fragmentation of stools
- Incontinence
- Tenesmus
Reasons why this occurs

- Direct surgical trauma to anal sphincters
- Reduced rectal capacity
- Change in anorectal angle
- Reduced capacity for water reabsorption
- Alteration in external and anal sphincter function
- Poor co-ordination of the muscles used in defecation
- Above effects can result in a loss of perceived control over bowel function which increases anxiety and exacerbates symptoms
High risk patients

- Low anastomosis
- Radiotherapy
- Ileostomy for more than 12 weeks
- Age over 75yrs
- Pre-existing bowel dysfunction
Tied to the toilet....
What can we do to help?

- Describe anatomical changes
- Explain normal defecation process
- Introduce concept of a ‘new normal’
- Offer reassurance that majority of individuals will achieve an acceptable level of bowel function within 12 months
- Assessment of symptoms
- Manage symptoms
How often do you have you bowels open?
  * Good day
  * Bad day

Do you need to open your bowels again within one hour?

Can you tell the difference between wind and motion?

Can you make it to the toilet in time?

Skin care?

LARS Score – assessment tool
  * None
  * Mild
  * Major
### LARS-score - Scoring Instructions

Add the scores from each 5 answers to one final score.

<table>
<thead>
<tr>
<th>Question</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you ever have occasions when you cannot control your flatus (wind)?</td>
<td></td>
</tr>
<tr>
<td>□ No, never</td>
<td>0</td>
</tr>
<tr>
<td>□ Yes, less than once per week</td>
<td>4</td>
</tr>
<tr>
<td>□ Yes, at least once per week</td>
<td>7</td>
</tr>
<tr>
<td>Do you ever have any accidental leakage of liquid stool?</td>
<td></td>
</tr>
<tr>
<td>□ No, never</td>
<td>0</td>
</tr>
<tr>
<td>□ Yes, less than once per week</td>
<td>3</td>
</tr>
<tr>
<td>□ Yes, at least once per week</td>
<td>3</td>
</tr>
<tr>
<td>How often do you open your bowels?</td>
<td></td>
</tr>
<tr>
<td>□ More than 7 times per day (24 hours)</td>
<td>4</td>
</tr>
<tr>
<td>□ 4-7 times per day (24 hours)</td>
<td>2</td>
</tr>
<tr>
<td>□ 1-3 times per day (24 hours)</td>
<td>0</td>
</tr>
<tr>
<td>□ Less than once per day (24 hours)</td>
<td>5</td>
</tr>
<tr>
<td>Do you ever have to open your bowels again within one hour of the last bowel opening?</td>
<td></td>
</tr>
<tr>
<td>□ No, never</td>
<td>0</td>
</tr>
<tr>
<td>□ Yes, less than once per week</td>
<td>9</td>
</tr>
<tr>
<td>□ Yes, at least once per week</td>
<td>11</td>
</tr>
<tr>
<td>Do you ever have such a strong urge to open your bowels that you have to rush to the toilet?</td>
<td></td>
</tr>
<tr>
<td>□ No, never</td>
<td>0</td>
</tr>
<tr>
<td>□ Yes, less than once per week</td>
<td>11</td>
</tr>
<tr>
<td>□ Yes, at least once per week</td>
<td>16</td>
</tr>
</tbody>
</table>

**Total Score:**

**Interpretation:**

- 0-20: No LARS
- 21-29: Minor LARS
- 30-42: Major LARS
1. **STRENGTHENING EXERCISE**
Sit, stand or lie with your knees slightly apart. Squeeze and pull up the back passage/anal sphincter muscle as tightly as you can. Hold tightened for as long as you can. Relax for 10 seconds.
Repeat at least 5 times.

2. **ENDURANCE EXERCISE**
Remember your lift. Relaxed, it is resting on the first floor. Do not pull up to the fourth floor but rather just up to the second floor. Time how long you can hold this for. Relax for 10 seconds.
Repeat at least 5 times.

3. **CO-ORDINATION EXERCISE**
In quick succession pull up your muscle as tightly as you can, let go, do it again! Count how many times you can do this before you get tired. Try for at least 5 quick pull ups.

Try and do these exercises a few times every day. As the muscle gets stronger you will find that you can squeeze tighter, hold for longer and do more quick pull ups before you get tired. Get into the habit of doing the exercises when you do something else regularly-when you turn a tap on, or when you are in the car, waiting for the traffic lights to change from red to green!
You will need to do anal sphincter muscle exercises every day for several months before you notice an improvement.

**DON’T GIVE UP!**
<table>
<thead>
<tr>
<th>Type 1</th>
<th>Separate hard lumps, like nuts (hard to pass)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2</td>
<td>Sausage-shaped but lumpy</td>
</tr>
<tr>
<td>Type 3</td>
<td>Like a sausage but with cracks on its surface</td>
</tr>
<tr>
<td>Type 4</td>
<td>Like a sausage or snake, smooth and soft</td>
</tr>
<tr>
<td>Type 5</td>
<td>Soft blobs with clear-cut edges (passed easily)</td>
</tr>
<tr>
<td>Type 6</td>
<td>Fluffy pieces with ragged edges, a mushy stool</td>
</tr>
<tr>
<td>Type 7</td>
<td>Watery, no solid pieces, Entirely liquid</td>
</tr>
</tbody>
</table>
Loperamide

- 2 mg Loperamide capsules - titrate dose until soft formed stool (Bristol stool scale type 4) and take 30 minutes prior to meals

- Liquid Lopermaide - to take a lower dose to titrate up to effective dose. 1mg/5mls
Toileting advice

- How do you sit on the toilet?
- How do you push?
- What is your routine
- Urge resistance
- Wiping – skin care
- Pads/toilet cards/planning
Correct position for opening your bowels

<table>
<thead>
<tr>
<th>Step one</th>
<th>Step two</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="" /></td>
<td><img src="image2" alt="" /></td>
</tr>
</tbody>
</table>

Correct position

![](image3)
Diet

* Regular meals – not skipping meals

* Fibre
  * Reducing insoluble fibre
  * Increasing soluble fibre (Fybogel)

* Avoiding
  * Caffeine
  * Sorbitol
  * Alcohol – dehydration and shortens transit time

* Low FODMAP diet – good for IBS + IBD – not always beneficial for LARS

* Food and bowel diary to identify triggers
Some types of fresh, tinned or dried fruit.
Vegetables such as sprouts, broccoli, cabbage, cauliflower, cucumber, onions, radishes, spinach and sweetcorn.
Baked beans, kidney beans, lentils, chickpeas and other pulses
Bran and foods high in insoluble fibre
Spices such as chilli, curry and ginger
energy drinks
Nuts, linseeds and popcorn
Caffeine in coffee, tea, chocolate drinks, cola drinks and some
Sugar-free foods containing sorbitol, mannitol or xylitol.
Chocolate
Alcohol – especially beer and red wine
Food that may cause wind

- Vegetables such as sprouts, broccoli, cabbage, cauliflower, cucumber, onions, radishes, spinach and sweetcorn
- Baked beans, kidney beans, lentils, chickpeas and other pulses
- Nuts
- Bran cereals
- Eggs and dairy produce
- Beer and fizzy drinks
- Chewing gum
- Sorbitol
Foods that may help firm stools

- Apples and pears with their skins removed
- Bananas
- Potatoes
- Yoghurt
- White bread (not high-fibre), boiled white rice, pasta (not wholemeal)
- Chicken and fish.
If still struggling

* GI Physiology- Anal Rectal Manometry
* Gastroenterology
* Percutaneous Tibial Nerve stimulation
* Rectal irrigation
* Anal plugs
* Stoma
Radiotherapy causes mucosal changes characterised by inflammation or cell death, progressive ischaemia fibrosis and loss of stem cells.

- Effects small bowel causing bile acid malabsorption
- Bacterial overgrowth

- Available to order on Macmillan webpage