Nutrition and IBD

Presented by

Hannah Price, paediatric dietitian at RHH
Hannah.price@ths.tas.gov.au

Lauren Farquhar, adult dietitian at RHH
Lauren.farquhar@ths.tas.gov.au
Microbiota and IBD

- The human intestinal microbiome is composed of a diverse group of microorganisms colonising the gastrointestinal tract.
- IBD is associated with alterations in the composition of the intestinal microbiota generally characterised by decreased diversity.
- Patients with active IBD have different microbial composition compared to patients in remission.
- Dietary composition was shown to affect the microbiota balance, therefore, it is conceivable that altering the diet can impact the inflammatory response.
Nutritional Status and IBD

- Need to ensure adequate growth in children and weight maintenance in adults
- When in active disease malabsorption can occur due to the inflammation
  - Malnutrition
  - Micronutrient deficiencies
- Symptom management
  - Poor appetite and intake due to pain and change in bowel habits
- Increased requirements due to inflammation
- Unnecessary food restrictions, particularly those prior to diagnosis and difficulty reintroducing given history
- Drug induced malabsorption (steroids decreases calcium absorption)
Crohn’s - Treatment During an Exacerbation

Paediatrics

- Exclusive Enteral Nutrition (EEN) often first choice
- Enables gut rest and also provides adequate nutrition to improve growth
- Generally for 6-8 weeks
- Use polymeric feeds as more palatable, may require nasogastric feeds if unable to take orally
- Reintroduction starts with plain low fibre, low lactose foods and upgrades to normal diet within a few weeks whilst titrating down nutritional supplement drinks
- May still continue on some nutritional supplement drinks along with diet to help ensure adequate energy and nutrient intake
Adults

- The use of EEN in adults is not routine. However there is emerging evidence suggesting it can be as effective as corticosteroid therapy.
  - New diagnosis, ileal involvement
  - Poor compliance in older studies with less palatable feeds
- The future of EEN in the adult population may be set to change! Working group established June 2018.
- During an exacerbation dietary management currently involves adopting a low fibre or low residue diet (limited fruit and vegetables, white bread and pasta, no nuts and seeds)
- The length of dietary change is usually indicated by symptom resolution
- It is then encouraged to increase fibre back to normal amount when feeling well
Ulcerative Colitis - Treatment During an Exacerbation

- Limited evidence as to the role of diet in the management of UC
- In adults a low fibre diet may be recommended to provide symptom relief
- Encouraged to monitor for trigger foods but not overly restrict
- The use of probiotics, particularly *E. Coli* Nissle 1917, *Lactobacillus* GG, Probio-Tec AB-25 and a multi-strain probiotic called VSL no. 3 may be effective in maintaining remission
- Future studies need to focus on the effects of different probiotic strains and different dosages to determine which patients would benefit from probiotic treatment
- Enteral nutrition does not have a primary therapeutic option in UC but can be used for nutrition support
The use of supplementary or partial EN in combination with whole foods may have the potential to induce and maintain remission.

Partial EN has shown to be effective in preventing postoperative recurrence of CD.

The use of EEN >4 weeks prior to surgery could reduce the need for surgical resections:
- Reduce poor surgical outcomes
- Significant reduction in recurrence rates after resection
- Lower rates of stoma creation
- Decrease in urgent operation requirement
- Reduce the need for immune suppression
Diet after resections

UC – colostomy
• Majority of bowel function maintained
• Fluid is important
• Can manipulate diet according to output

CD – ileostomy / short gut
• Nutritional implications different depending on how much GIT is left and where the resection occurred
• Ileal resections require the most nutritional intervention
• Particularly B12, electrolytes and fluid
• Can manipulate diet according to output
FODMAPS

- **Fermentable Oligosaccharides, Disaccharides, Monosaccharides and Polyols**
- A low FODMAP diet is commonly used to help manage the symptoms of IBS
- Research suggests that it may also be useful with symptom management in IBD
- In patients with CD, a low FODMAP diet did not reduce the total amount of gut bacteria, but did change the types of bacteria present
- A low FODMAP diet may help alleviate symptoms when no active disease is present, unsure if there is any impact on inducing or maintaining remission
Where to get more info

• See a dietitian
  – Ask for a referral from your gastroenterologist, GP or paediatrician
  – Can be seen at RHH or privately
  – Dietitians Association of Australia lists Accredited Practicing Dietitians
    – https://daa.asn.au
    – Email us lauren.farquhar@ths.tas.gov.au or hannah.price@ths.tas.gov.au

• Useful websites and resources
  – https://www.crohnsandcolitis.org.uk
  – https://www.monashfodmap.com
References