Chapter 1
Gastro-intestinal system

CONTENTS

1 Chronic bowel disorders

1.1 Coeliac disease

Coeliac disease

25-Jul-2016

Description of condition

Coeliac disease is an autoimmune condition which is associated with chronic inflammation of the small intestine. Dietary proteins known as gluten, which are present in wheat, barley and rye, activate an abnormal immune response in the intestinal mucosa, which can lead to malabsorption of nutrients.

Aims of treatment

The management of coeliac disease is aimed at eliminating symptoms (such as diarrhoea, bloating and abdominal pain) and reducing the risk of complications, including those resulting from malabsorption.

Non-drug treatment

EvGr The only effective treatment for coeliac disease is a strict, life-long, gluten-free diet. A range of gluten-free products is available for prescription (see *Borderline substances*). A

Drug treatment

EvGr Children who have coeliac disease are at an increased risk of malabsorption of key nutrients (such as calcium and vitamin D). Supplementation of key nutrients may be required if dietary intake is insufficient.

Carers of children who have coeliac disease should be advised **not** to medicate with over-the-counter vitamin or mineral supplements. Initiation of supplementation should involve a discussion with a member of the child's healthcare team in order to identify the individual needs of the patient and to allow for appropriate ongoing monitoring. A

Useful Resources

Coeliac disease: recognition, assessment and management. National Institute for Health and Care Excellence. Clinical guideline 20. September 2015.
www.nice.org.uk/guidance/ng20

1.2 Inflammatory bowel disease

Inflammatory bowel disease

Chronic inflammatory bowel diseases include Ulcerative colitis p. 32 and Crohn's disease below.

Drugs used in inflammatory bowel disease

Aminosalicylates

Sulfasalazine p. 36 is a combination of 5-aminosalicylic acid ('5-ASA') and sulfapyridine; sulfapyridine acts only as a carrier to the colonic site of action but still causes side-effects. In the newer aminosalicylates, mesalazine p. 34 (5-aminosalicylic acid), balsalazide sodium p. 34 (a prodrug of 5-aminosalicylic acid) and olsalazine sodium p. 36 (a dimer of 5-aminosalicylic acid which cleaves in the lower bowel), the sulfonamide-related side-effects of sulfasalazine are avoided, but 5-aminosalicylic acid alone can still cause side-effects including blood disorders and lupus-like syndrome also seen with sulfasalazine.

Drugs affecting the immune response

Folic acid p. 620 should be given to reduce the possibility of methotrexate toxicity. Folic acid is usually given once weekly on a different day to the methotrexate p. 588; alternative regimens may be used in some settings.

Cytokine modulators

Infliximab p. 38 and adalimumab p. 693 are monoclonal antibodies which inhibit the pro-inflammatory cytokine, tumour necrosis factor alpha. Cytokine modulators should be used under specialist supervision.

Crohn's disease

20-Dec-2016

Description of condition

Crohn's disease is a chronic, inflammatory bowel disease that mainly affects the gastro-intestinal tract. It is characterised by thickened areas of the gastro-intestinal wall with inflammation extending through all layers, deep ulceration and fissuring of the mucosa, and the presence of