SCLERODERMA & RAYNAUD'S UK

The Gastro-Intestinal Tract in Systemic Sclerosis (Systemic Scleroderma)

The gastrointestinal tract or gut runs from top (mouth) to tail (anus). Its function is to allow intake, digestion and absorption of food and disposal of waste in the form of faeces. The gut is involved in up to 90% of patients with systemic sclerosis. Any part of the gut can be affected from mouth to anus. Gut involvement can occur at any time in the course of the disease and it can be progressive but not invariably so.

Food is propelled along the gut through co-ordinated contractions of the muscles in the gut wall (peristalsis). In systemic sclerosis, thickening of the gut wall and atrophy (thinning) of the muscles can lead to failure of this process (dysmotility). These changes can occur at any part of the gut leading to a variety of symptoms depending on the sites affected.

The gut is involved in up to **90% of patients** with systemic sclerosis

Oesophagus

The oesophagus (gullet) is the tube that runs from the mouth to the stomach. It is involved in most patients with systemic sclerosis (80-90%) although does not always cause symptoms.

Main features

Dysmotility and lack of peristalsis (co-ordinated movement of oesophageal body in response to swallowing). Gastro-oesophageal reflux (acid from the stomach slipping back into the oesophagus); this can lead to other complications such as oesophagitis and strictures.

Typical symptoms

Difficulty swallowing, heartburn, waterbrash/reflux

Investigations

Gastroscopy: A procedure done usually under sedation where a flexible telescope is passed by the mouth down into the stomach. It allows direct vision of the oesophagus, stomach and first bit of the small bowel.

Oesophageal physiology studies (to look at motility and acid reflux): this involves a small tube being passed from the nose to the stomach. The amount of acid reflux can be measured by a 24 hour study, again involving a small tube passed from the nose to the oesophagus.
Others: Barium swallow/meal

Treatment

Many different treatments can be used and are often very effective. Practical changes, such as raising the head of the bed, can be very helpful to give immediate relief.

Drugs: Acid suppressants: Proton pump inhibitors (PPI) e.g. omeprazole, lansoprazole – (may need high doses), ranitidine; prokinetics (drugs that accelerate stomach emptying) eg domperidone, metoclopromide.

The stomach

The stomach is less commonly involved in systemic sclerosis. The two main features are: Vascular lesions (e.g. gastric antral vascular ectasia) can lead to bleeding both acute and chronic, and the patient may present with anaemia. Delayed emptying of the stomach due to dysmotility, which may contribute to reflux.

Symptoms
Bloating, fullness after meals.

Investigations
Gastroscopy, gastric emptying study

Treatment
- Endoscopic treatment of vascular lesions (laser treatment)
- PPIs (proton pump inhibitors), prokinetics (e.g. domperidone, erythromycin)

The small and large bowel

The small intestine is the part of the body that absorbs most of the nutrients from the food that is digested. The small bowel can be affected in a number of ways and can lead to reduced movement, reduced absorption, dilatation, diverticulae and overgrowth of bacteria (normally the small intestine has a very small number of bacteria). The colon's main function is to reabsorb water and salts that have been secreted by the rest of the gut and to dispose of the waste in the form of faeces. This can also be affected by dysmotility.

Symptoms
- Nausea and vomiting
- Bloating
- Increased flatus (wind)
- Pain
- Diarrhoea
- Constipation (colonic involvement)

Investigations
It is important to exclude other causes e.g. coeliac disease, large bowel abnormality.
- Hydrogen breath test for bacterial overgrowth
- Barium follow through (X-ray investigation of the small bowel)
- Colonoscopy to assess the large bowel

Treatment
- Prokinetics
- Loperamide, opiates for diarrhoea
- Laxatives – non-stimulant
- Antibiotics (often cyclical courses) for bacterial over growth

Anorectum

The rectum has the capacity to hold a volume of faeces until such a time that evacuation is possible. Continence is maintained through the help of the anal sphincters. The anorectum is the second most commonly affected part of the gut.

Main Features
- Anal sphincter atrophy (thinning)
- Neuropathy leading to reduced sensation and reflex impairment
- Rectal prolapse
- Reduced rectal compliance (stiff, less stretchable rectum leading to urgency and increased bowel frequency)

Symptoms
- Increased bowel frequency
- Constipation
- Evacuation difficulty
- Faecal incontinence

Investigations
- Anorectal physiology studies: tests that check the function and structure of the anal sphincters and rectum and involve a small probe inserted at the tail end
- Barium or MR proctogram: a specialised X-ray test that assesses defecation

Treatment
- This is tailored to individual's symptoms and the abnormalities found.
- Loperamide, opiates, anal plugs: for treatment of diarrhoea and incontinence
- Biofeedback: behavioural re-training of the gut and exercises of the anorectum
- More specialised treatments: trans-anal irrigation, sacral nerve stimulation, surgery (e.g. rectal prolapse repair)

Nutrition

Poor oral intake and weight loss can sometimes be a problem in patients with systemic sclerosis. Small but frequent meals and nutritional and vitamin supplements are often adequate treatment. Sometimes more extreme approaches are needed for patients with more severe weight loss and malnutrition who are unable to eat adequately by mouth, such as a small tube passed into the stomach, nasogastric tube, PEG or intravenous feeding. Often these are temporary measures.

Bride House
18-20 Bride Lane
London
EC4Y 8EE
T: 020 7000 1925
E: info@sruk.co.uk

112 Crewe Road
Alsager
Cheshire
ST7 2JA
T: 01270 872776
E: info@sruk.co.uk

Helpline: 0800 311 2756

www.sruk.co.uk

@WeAreSRUK **/WeAreSRUK**

Registered Charity England and Wales No 1161828

Reprinted March 2016