

The Gastro-Intestinal Tract in Systemic Sclerosis (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, metoclopramide.

We are here for you,
when you need us.

0800 311 2756

Our helpline operates
365 days a year

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.

Keeping a food diary

For some people, a trial of dietary modifications may be helpful.

Whilst there is no single diet regime that works for everyone, keeping a food diary to help identify any problematic foods can help you to understand the relationship between your body and what you eat. Begin a new page every day and write everything down, to show how certain foods may be affecting how you feel, for better or for worse, as well as what agrees with you and what probably does not.

Working with a dietician is important if you are considering an elimination diet; as this will help to ensure that you are getting all the vitamins and nutrients you need to stay healthy and to maintain a steady weight during this period. Your doctor or specialist nurse can refer you to a dietician who can offer more personalised help in this area. For further information, please visit, sruk.co.uk/scleroderma/managing-scleroderma/nutrition/

Scleroderma & Raynaud's UK

We are here for you, to support you through your diagnosis and to help you understand and manage your condition.

We know how important it is to join a community that understands your condition, provides expert information and support, works for you to improve access to treatment and care whilst driving research into more effective treatments as we work to find a cure.

Ways we can support you

Our informative website has up to date, specialist information on Scleroderma and Raynaud's, personal stories from the community on managing the conditions and details on services and events that are available in your local community. You can find information, support and friendship through our online community: www.sruk.co.uk

Our helpline operates 365 days a year providing support and information to everyone affected by or interested in Scleroderma and Raynaud's: **0800 311 2756**. Our experienced helpline volunteers understand the challenges and difficulties you face and provide a confidential space to talk through worries or concerns.

To order printed copies of SRUK publications, please call: **020 3893 5998** or email: info@sruk.co.uk

Find out more about the work of the charity and how we can support you by visiting our website: www.sruk.co.uk or calling our friendly team on: **020 3893 5998**.

Interested in joining our community?

We have a variety of ways that you can join the community. Our most popular is to become a member. For a small subscription fee you will receive 4 magazines per year, free attendance at annual conference, priority booking for educational events and member only discounts for our shop products.

Find out more about all the ways you can join the community by visiting our website: www.sruk.co.uk or calling our friendly team on: **020 3893 5998**.

Sources used

We rely on several sources to gather evidence for our information. All our information is in line with accepted national or international clinical guidelines where possible. Where no guidelines exist, we rely on systematic reviews, published clinical trials data or a consensus review of experts. We also use medical textbooks, journals, and government publications.

If you would like further information on the sources we use on a particular publication, please contact the Information and Support Services team at info@sruk.co.uk

Valuing your feedback

As someone who has received a copy of this booklet, we would very much value your opinion on whether it meets the needs of people affected by Scleroderma and Raynaud's. Please complete the survey online at sruk.co.uk/publications

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Bride House
18-20 Bride Lane
London
EC4Y 8EE
T: 020 3893 5998
E: info@sruk.co.uk

Helpline: 0800 311 2756

www.sruk.co.uk

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