

Nutrition

Poor oral intake and weight loss can sometimes be a problem in patients with scleroderma. Small but frequent meals, nutritional and vitamin supplements is 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 or PEG or intravenous feeding, often these are temporary measures.



The Gastro- Intestinal Tract

You can get more information about Scleroderma from:
The Scleroderma Society
PO Box 581, Chichester, PO19 9EW Tel: 020 7000 1925

Published by The Scleroderma Society © 2009
Charity Registration Number 286736
www.sclerodermasociety.co.uk
[email:info@sclerodermasociety.co.uk](mailto:info@sclerodermasociety.co.uk)
Advice Line: 0800 311 2756

www.sclerodermasociety.co.uk
PO Box 581, Chichester, PO19 9EW Tel: 020 7000 1925

This edition revised in September 2009
email:info@sclerodermasociety.co.uk
Advice Line: 0800 311 2756

The production costs of this leaflet have been supported by
Actelion Pharmaceuticals UK Ltd and Pfizer Ltd

Introduction

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 scleroderma, 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.

Oesophagus

The oesophagus (gullet) is the tube that runs from the mouth to the stomach. It is involved in most patients with scleroderma (80-90%) although not always causing 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, 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):

Involves a small tube passed from the nose to the stomach. The amount of acid reflux can be measured by a 24 hr 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) eg omeprazole, lansoprazole – (may need high doses), ranitidine; *prokinetics* (drugs that accelerate stomach emptying) eg domperidone, metoclopramide

The Stomach

The stomach is less commonly involved in scleroderma. The 2 main features are:

- Vascular lesions (eg gastric antral vascular ectasia) can lead to bleeding both acute and chronic, may present with anaemia.
- Delayed gastric emptying secondary to dysmotility, may contribute to reflux.

Symptoms:

bloating, fullness after meals.

Investigations:

Gastroscopy, Gastric emptying study

Treatment:

- endoscopic treatment of vascular lesions (laser treatment)
- PPIs, prokinetics (eg 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 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 eg 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 overgrowth

Anorectum

The rectum has the capacity to hold a volume of faeces till 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 Xray test that assesses defaecation

Treatment:

- This is tailored to individual's symptoms and 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 (eg rectal prolapse repair)