



# Mesenteric Ischaemia

## What is Mesenteric Ischaemia?

Mesenteric ischaemia is an uncommon condition characterised by abdominal pain caused by inadequate blood flow through the arteries supplying the gut (splanchnic arteries). There are three main splanchnic arteries which arise from the abdominal aorta: a) *coeliac trunk* (supplies the stomach, duodenum, liver, pancreas & spleen), b) *superior mesenteric artery* (supplies the small bowel and half of large bowel), & c) *Inferior mesenteric artery* (supplies the left colon, & rectum). All three arteries cross supply each other's territories and thus typically two or more arteries need to be compromised (narrowed or blocked) before a patient develops symptoms.

## What causes Mesenteric Ischaemia

Atherosclerosis is the main cause of mesenteric ischaemia and the majority of patients affected tend to be senior in years and have concomitant risk factors for atherosclerosis: high cholesterol, diabetes, high blood pressure, tobacco smoker. Occasionally the coeliac artery can become compressed by an abnormal slip of diaphragm muscle leading mesenteric ischaemia, this is called median arcuate syndrome.

## What symptoms may I notice?

Relative gut ischaemia occurs after eating when there is an increase call for blood flow to the gut in order for it to fulfil its digestive function. This characteristically causes a dull transient pain centred around the umbilicus (belly button) commencing half an hour after food and lasting 1-4 hours: intestinal angina. As a result, you may fear and avoid eating large meals and with time significant weight loss often occurs. Physical examination is often normal early on in the disease.

## How is it diagnosed

The diagnosis is based around an accurate review of your clinical history, a thorough clinical examination, targeted blood tests and imaging investigations. Most of our clients will be referred from other medical specialties following the exclusion more common alternative diagnoses e.g. chronic pancreatitis, stomach ulcer, gallstones.

If your surgeon suspects mesenteric ischaemia a number of non-invasive imaging investigations (ultrasound, CT scan or MRI) will be organised to assess the splanchnic arteries for stenoses (narrowings) or occlusions (blockages). Occasionally a percutaneous angiogram is needed to further assess extent of disease during which concomitant treatment may be performed depending on the discussions you have had with your surgeon prior to the procedure.

## What are the treatments for Mesenteric Ischaemia?

The aim of all treatments for mesenteric ischaemia is to re-establish adequate blood flow to the gut organs thereby relieving your symptoms and improving your quality of life. Treatments centre around either a) endovascular therapy e.g. balloon angioplasty with or without stent insertion, or b) open surgical reconstruction e.g. endarterectomy or bypass. Both treatment modalities have their advantages and potential disadvantages which will be discussed with you by your supervising surgeon. In general, the less invasive endovascular approach is favoured initially, however if there is recurrence of the artery stenosis/occlusion then open surgical reconstruction may be indicated.



**CIRCULATION CLINIC**  
THE ARTERY AND VEIN SPECIALISTS