This factsheet is about Chronic Intestinal Pseudo-obstruction

Chronic Intestinal Pseudo-obstruction (CIP) is a rare condition which can affect any part of the gut (intestine). Symptoms resemble those caused by a blockage (obstruction) of the gut, but when investigated no blockage is found. It is caused by either an abnormality in the nerves or muscles of the gut, which leads to altered and inefficient contractions (peristalsis) of the digestive tract, so gut content does not pass through properly.

Causes of Chronic Intestinal Pseudo-obstruction

When food is ingested, the gut usually has coordinated muscle contractions to help the food pass through. However, in CIP this does not happen, the contractions are weak or uncoordinated and gut content does not pass through properly. In the majority of cases, what damages the muscle and/or nerves of the gut is not clear. Occasionally, CIP can be a result of another disease not related to the gut. Examples include autoimmune conditions such as lupus and rheumatoid arthritis, disorders affecting hormone regulation such as underactive thyroid and neurological disorders such as Parkinsons disease. Patients with Ehlers-Danlos syndrome can also be affected. It can also, rarely, be caused by infections such as glandular fever, or follow abdominal surgery. Some forms of cancer or even certain medications such as some anti-depressants and opiates can extremely rarely cause CIP. The condition can affect people at any age.

What are the usual symptoms?

Common symptoms in patients with CIP include constipation, nausea, vomiting, bloating of the abdomen and abdominal pain. These symptoms can mimic bowel blockage, so patients are often seen repeatedly in Emergency Departments before the diagnosis is made. As the disease progresses it can lead to reduced appetite, weight loss and malnutrition. Recurrent bouts of pain can be so severe that morphine-like medications are needed, and these have the side-effect of making most of the symptoms worse.

How is Chronic Intestinal Pseudo-obstruction diagnosed?

An abdominal x-ray, and more detailed CT scan of the bowel is needed to help rule out a mechanical obstruction in the bowel. An MRI of the bowel may also be performed and will typically show an enlarged (“dilated”) intestine. If these scans do not show anything, then transit studies of the gut may be performed to see how content travels through the gut. Manometry (pressure studies) may be used to measure contractions of the gut. This can diagnose CIP and show the extent of the condition. Blood tests are needed to look for anaemia, infections, hormone levels and antibodies. These help to establish whether a cause can be found for CIP.

Rarely, some people may go onto have a small biopsy (tissue sample) of the gut, so the muscles and nerves can be directly visualised and examined. However this involves surgery, which in itself has risks.

What can be the impact of Chronic Intestinal Pseudo-obstruction?

CIP can impact a person in many ways. These include the symptoms it causes and effect on general wellbeing due to social issues. Symptoms from CIP can be long term, occur frequently or are constant. They can be debilitating and affect daily activities. It is recognised that recurrent severe symptoms with no clear cause can cause major upset, frustration and feelings of hopelessness amongst many patients. If any of these feeling are experienced, it is important to let the doctor know, so that appropriate support can be organised.

What treatment is available for Chronic Intestinal Pseudo-obstruction?

The treatment of CIP can be challenging, and may need input from many different specialists including a Gastroenterologist (gut doctor), a dietician, a psychologist and if needed, a surgeon. These team members often need to work together to ensure an individualised treatment plan, according to symptoms, age and personal preference. Treatment can include diet changes, nutritional support, medications, decompression of the gut or surgery. If CIP is due to another condition, it is important that the underlying disorder is treated.

Diet and nutritional support

Some people with CIP may become malnourished. This can be potentially life-threatening so it is important that a dietician is involved at an early stage. Therefore, it is important to see a dietician, who can advise on certain diets,
depending on individual needs. People with CIP are advised to eat small meals and often, rather than three large meals a day and follow a low-fat, low-fibre diet. Fatty foods are thought to delay stomach emptying, and high fibre diets tend to cause bloating. If adequate nutrition cannot be maintained through eating food, then other feeding methods may be needed such as NG (nasogastric) or PEG (percutaneous endoscopic gastrostomy) feeding, or TPN (total parenteral nutrition, where feed is delivered directly into a vein).

Medications
Medications are used to help treat symptoms associated with CIP but do not cure it. Prokinetic drugs which aim to improve gut movement by increasing the frequency of contractions can be used. Some examples include domperidone, metoclopramide, erythromycin, octreotide and prucalopride. For nausea, anti-sickness medications can be used. If pain is severe, painkillers can be prescribed. However, it is important to be aware that morphine and morphine derivatives (such as codeine) can make symptoms worse. Low dose anti-depressants and gabapentin can be used to treat chronic pain.

Decompressions
If the gut becomes very large, and the patient does not respond to medications, the excess gas may need to be removed in a procedure called decompression. This helps reduce the pressure in the digestive tract. It can be performed using tubes passed through the mouth or rectum (back passage).

Surgery
Surgery is reserved for severe cases and is rarely performed as CIP normally affects the whole gut. However, when CIP is thought to be limited to one section of the gut, surgery may be used to remove that portion. Extremely rarely patients may be considered for intestinal transplant. In general however, a key goal is to avoid surgical intervention.

Does Chronic Intestinal Pseudo-obstruction need to be monitored and, if so, how?
If the symptoms of CIP are well controlled, then regular follow-up with a doctor is not necessary. However, if symptoms are ongoing, regular follow-up is useful to ensure that new treatments for symptom control can be considered and nutrition is monitored. If nutritional support is required, then regular follow-up with a doctor, dietician and/or nutrition nurse is important to monitor weight and ensure the feeding regime is adequate.

How does Chronic Intestinal Pseudo-obstruction behave over time?
For some people with CIP, medications alone may be helpful. However, in general, people with CIP tend to have ongoing symptoms, despite treatment.

What to ask your doctor when you see them?
May I be referred to a dietician to see if there are any changes to my diet or supplements I can take?
Are there any support groups I can join? How often do I need follow-up?

What more research needs to be done on Chronic Intestinal Pseudo-obstruction?
Unfortunately, there is no cure for CIP. Further research into different treatments, such as more specific medications or a bowel pacemaker that could help manage symptoms more effectively. For more information about research in this area please contact Core.