

## Distal Intestinal Obstruction Syndrome and Cystic Fibrosis for Adults

### What is DIOS?

Distal Intestinal Obstruction Syndrome (DIOS) is a complication of Cystic Fibrosis (CF). It occurs when the bowel becomes partially or completely blocked.

### Symptoms

Symptoms vary widely and can include:

- Cramps, abdominal pain and bloating
- Harder stools, fewer bowel motions
- Appetite loss, nausea and/or vomiting
- Weight loss

The gut may even become completely blocked. A hard, immobile mass is often felt on the right side of the stomach.

### Causes

People with CF who were born with a meconium ileus, have had gut surgery or have previously had DIOS are more likely to develop DIOS.

DIOS usually occurs with a change of routine, for example:

- Illness or chest exacerbation
- Decreased physical activity
- Change in diet
- Change in environment
- Change of social situation (e.g. starting a new job or moving house)

This is usually connected with reduced fluid intake and/or inadequate enzyme supplements. The contents of the bowel can then become thicker and stickier, causing the bowel to become blocked.

### Diagnosis

DIOS is diagnosed with an x-ray. The x-ray shows the gut (intestine) filled with large amounts of impacted (compressed) faeces at the end of the small intestine and/or start of the large intestine. It may also show dilated (enlarged) loops of the small intestine.

## Treatment

Mild cases of DIOS are treated with Movicol (constipation treatment). In more severe cases, Gastrograffin and/ or Golytely (an intestinal lavage solution) is used orally, via a nasogastric tube or button. This draws fluid into the gut to dislodge impacted stool. This treatment requires extra oral or IV fluid. If significant abdominal symptoms reoccur, a gastroenterologist should be consulted.

## Prevention

As DIOS can often reoccur, it is important to recognise the symptoms early to prevent the onset of DIOS.

The following ideas may help to prevent DIOS:

- Have adequate enzymes for all foods and fluids. Avoid excessive doses.
- Have adequate fluid (e.g. milk, water, salt replacement drink) and salt intake, especially when playing sport, in hotter climates, and during illness.
- Eat lots of fruit, vegetables and high fibre breads and cereals as well as a high calorie, high salt diet.
- Exercise daily.
- Move bowels daily. Avoid delaying when you have the urge to pass a stool.
- Take regular stool softening medication as prescribed by your doctor (e.g. lactulose, pear juice)
- Regular probiotics help to restore good bacteria back into the gut. Examples include yoghurt (e.g. Vaalia or Yakult), or in tablet form (e.g. Inner Health Plus).

## Things I can do to try to prevent DIOS:

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For further information, contact your Dietitian or Cystic Fibrosis Centre:

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