

This sheet contains only some of the information available on this topic. For more information, please talk to members of your CF care team.

Rutgers Robert Wood Johnson Medical School

DISTAL INTESTINAL OBSTRUCTIVE SYNDROME (DIOS) INFORMATION SHEET

WHAT IS DIOS?

Distal intestinal obstruction syndrome (DIOS) was previously called meconium ileus equivalent (MIE). It commonly occurs in about 10-20% of people with cystic fibrosis (CF). Mutations in the CFTR gene lead to abnormal salt and water balance, sticky mucus, poor motility and impacted secretions in the intestine. DIOS occurs when mucus and dried secretions accumulate in intestine causing an obstruction (blockage).

WHAT FACTORS CAN LEAD TO DIOS?

The following factors can contribute to the development of DIOS: dehydration, changes in your diet, being immobile for a period of time, respiratory infections, overgrowth of bacteria, medications that can cause constipation and inadequate pancreatic enzyme replacement therapy.

WHAT ARE SYMPTOMS OF DIOS?

DIOS can occur suddenly or over a period of time. Acute (sudden) symptoms may include: lower abdominal pain, diarrhea and a tender mass in the right lower portion of your abdomen. In the chronic form, DIOS can present with symptoms such as anorexia, colicky abdominal pain, abdominal distension, fatty stools and constipation.

HOW IS DIOS DIAGNOSED?

An x-ray of the abdomen is taken to diagnose DIOS in someone who is having symptoms. Blood work, including electrolytes and amylase level, may be checked. Sometimes, in less clear cut cases, an abdominal ultrasound may be necessary.

HOW IS DIOS TREATED?

DIOS is treated with the following therapies, hydration, medications, dietary changes and pancreatic enzyme replacement.

Adequate hydration is the main form of treatment and prevention. It is important to keep drinking fluids, particularly during the summer. If a one develops DIOS and is not able to take fluids by mouth, intravenous (IV) fluids may be necessary.

Stool softeners (lactulose) and osmotic agents (polyethylene glycol electrolyte PEG) such as Miralax or Golytely are often used. They act by pulling water into the intestine, increasing the volume of intestinal contents and stimulating motility. Occasionally Mucomyst may be used (N-acetyl cysteine). The choice of therapy depends on the severity of the episode. In severe cases, a gastrograffin enema will be performed by an experienced radiologist.

A well-balanced, healthy diet with an adequate source of fiber and fluids should be maintained. It is important to avoid binge eating or grazing/snacking without pancreatic enzyme replacements.

It is important to take pancreatic enzymes as directed with each meal and snack. Occasionally, a medication such as Zantac, Prilosec or Prevacid may be added to block gastric acid and improve the effectiveness of pancreatic enzymes

