

# Bowel Obstruction Alert

This Medical Update is based on the work of our Medical Review Subcommittee and should be posted prominently. We will make an effort to take an active role in improving the services provided to people with disabilities by communicating important issues found in the Medical Review Subcommittee's review of deaths and serious injuries. We want to thank you for your prompt reporting of deaths and serious injuries. You are helping us meet our mission.

## Medical Update



This Medical Alert is based upon reports of client deaths that were attributed to a bowel obstruction. Many clients of the Office of the Ombudsman for Mental Health and Mental Retardation are at increased risk of bowel problems because of inability or limited ability to move, limited diets, use of certain prescription medications, cognitive limitations, and behaviors due to their conditions. Information about bowel management, early detection/prevention of bowel obstructions, and three case studies will be presented in this Alert.

### Normal bowel function:

Doctors often define **constipation** as a stool (or bowel movement) frequency of less than 3 times a week. Normal frequency of bowel movements can range from 3 times a day to 3 times a week. The pattern of bowel movements can be considered normal if it does not represent a change in the client's usual frequency or character of stool and if passing the stool is not associated with discomfort (pain). Discomfort may be reported or observed as straining, hard stool, or feelings that client is unable to empty the bowel.

Normal stool in an adult or child (not infant) is brown, soft and formed. White or clay-colored stool, black/tarry stool, bloody, thin ribbon-like stool, narrow/pencil-shaped stool, hard or liquid stool is usually considered abnormal.

### Why be so concerned about maintaining normal bowel function?

Constipation is more than an annoying problem. People with chronic constipation report they feel that they have a lower quality of life. People who have only one or two bowel movements per week are more likely to have obesity, diabetes, diverticulosis, hemorrhoids, and colon cancer. Constipation may lead to complications including fecal impaction, ulceration, bowel obstruction, sigmoid volvulus (the bowel twisting in a loop), incontinence of stool, rectal prolapse, urinary retention, and even **dizziness** (and falls). Increasing intestinal distension (stretching of the intestines) may lead to loss of blood flow to the bowel, perforation, and tissue death. Untreated, a bowel obstruction can cause hypovolemic or septic shock and death.

### Factors that may contribute to constipation:

**Dietary factors** – low residue (low fiber) diet, not drinking enough liquids

**Inactivity and immobility** – movement disorders, gait disturbance (difficulty with walking and balance), wheelchair use, scoliosis, cerebral palsy, quadriplegia, paraplegia

**Environmental factors** – lack of routine, lack of privacy, schedules that cause the client to ignore the urge to have a bowel movement (defecate)

**Structural abnormalities** – hemorrhoids, tumors, narrow openings

**Smooth muscle or connective tissue disorders** – amyloidosis, scleroderma

**Depression**

**Neurological disorders** such as stroke, Parkinson's disease, spinal cord tumors

**Metabolic/endocrine disorders** – high calcium, low potassium, low or high thyroid hormones (hypothyroidism or hyperthyroidism), diabetes, Addison's disease

Continued...

## Medical Update



## Medical Update



## Medical Update



## Medical Update



Office of the Ombudsman for Mental Health and Mental Retardation

Suite 420, Metro Square Bldg., St. Paul, Minnesota 55101-2117

(651) 296-3848 or 1-800-657-3506 TTY/voice - Minnesota Relay Service 1-800-627-3529

Web Site: <http://www.ombudmhm.state.mn.us>

# Medications to Discuss with your Clients

**Medications** - This list is intended to give common examples and cannot include all current or future medications that can cause constipation.

## Medical Update



**Opioid analgesics** – codeine (30 mg in Tylenol #3), fentanyl, morphine, oxycodone, hydromorphone, meperidine

**Nonsteroidal antiinflammatory drugs (NSAIDS)** – **Motrin**/ibuprofen, Celebrex, Indocin, Toradol, Vioxx

**Antacids** – Amphojel/aluminum hydroxide, Tums/calcium carbonate

**Anticholinergic drugs** – **Cogentin**/benztropine, scopolamine (transdermal), methscopolamine, atropine, propantheline

**Antidepressants** – particularly lithium and tricyclics (like Elavil, Anafranil, desipramine, Pamelor, Tofranil/imipramine)

## Medical Update



**Antipsychotics** – **Clozaril**, **Risperdal**, Zyprexa, Haldol, Seroquel, Mellaril, Thorazine

**Antihypertensives** – Captopril, Catapres/clonidine, Altace, Accupril, **Inderal**/propranolol

**Antiarrhythmics** – calcium channel blockers especially verapamil.

**Diuretics** – Diamox, Lasix, Hydrochlorothiazide, Zaroxolyn, torsemide

**Anticonvulsants** – Klonopin, Cerebyx, Neurontin, **Lamictal**, **Dilantin**/phenytoin, Topamax, Depakote, Felbatol

**Antihistamines** – Benadryl

**Anti-ulcer medications** – **Aciphex**

**Antilipidemics** - **Lipitor**

## Medical Update



### Maintaining Healthy Bowel Function:

Serve and eat foods high in fiber instead of refined carbohydrates and concentrated fats. Vegetables (dried beans, Brussels sprouts, corn, peas, and potatoes), fruits (apples with peels, raisins, and prunes), and cereals (bran and whole wheat and whole grain bread) are high in fiber. Some foods can act as natural laxatives: figs, prunes, pears, raisins, and rhubarb.

Added intake of liquids should accompany an increase in fiber intake. Adults need at least 8 glasses of non-caffeinated beverages per day, unless a fluid restriction is required because of a medical condition. Fruit juices and warm liquids can be helpful.

## Medical Update



Age-appropriate exercise program. Clients restricted to bed may benefit from range of motion exercises.

Establish a routine for bowel movements that includes a regular time and privacy. A bowel movement is most likely to occur an hour after meals. Positioning is important while attempting a bowel movement. Squatting increases pressure on the rectum and encourages use of abdominal muscles. Use of a toilet, raised toilet seat, or a bedside commode is better than the use of a bedpan whenever possible.

## Medical Update



Treatments used for constipation include bulk laxatives (psyllium or bran), stool softeners (Colace and Surfak), stimulants (bisacodyl or senna), osmotic laxatives (lactulose, milk of magnesia, sorbitol, sodium salts), lubricants (mineral oil), and enemas. With bulk laxatives and stool softeners, enough liquids must be taken to make them work.

**Frequent use of some laxatives is harmful and can be habit-forming.**

Talk with your clients about healthy bowel function and the signs and symptoms that are important to report to a health professional.

Continued...



**Office of the Ombudsman for Mental Health and Mental Retardation**

Suite 420, Metro Square Bldg., St. Paul, Minnesota 55101-2117

(651) 296-3848 or 1-800-657-3506 TTY/voice - Minnesota Relay Service 1-800-627-3529

Web Site: <http://www.ombudmhm.state.mn.us>

# Monitoring Bowel Functions

## Monitoring bowel function:

### Medical Update

It is important for every facility and home health care program to have an established procedure for monitoring bowel function and responding to changes. Clients should be asked on a daily basis whether they have had a bowel movement. The information needs to be documented in order to learn what the individual's normal routine is and to monitor for the development of problems.



**Be sure to monitor the bowel function of clients who have had recent abdominal surgeries, injuries, medication changes, and changes in diet or activity level.**

*Since many clients are unable or unlikely to communicate verbally because of cognitive challenges, staff must also be skilled at detecting non-verbal signs of pain or discomfort.*

### Medical Update

#### SIGNS AND SYMPTOMS OF CONSTIPATION



- Change in bowel frequency (decrease) or consistency
- **Soft, paste-like stool in rectum or hard stool with oozing liquid stool**
- Feeling of rectal fullness
- Straining at stool
- Decreased or hyperactive bowel sounds
- Report of feeling abdominal fullness or pressure
- **Distended (swollen) abdomen**
- Indigestion
- Severe gas
- **Nausea**
- **Other – back pain, headache, decreased appetite**

### Medical Update

#### SIGNS AND SYMPTOMS OF A BOWEL OBSTRUCTION



- **Abdominal pain** – may be described as dull, squeezing or ill-defined, constant, or “colicky” (a sharp pain that may come and go)
- **Abdominal distension** – swollen abdomen may push on diaphragm and affect breathing
- **Nausea and vomiting**
- **Decreased urine output** (from dehydration which is possible even without vomiting)
- **Constipation**
- **Fever, chills**
- Abnormal bowel sounds

### Medical Update



#### BOTTOM LINE

The symptoms of constipation and bowel obstruction can look like “the flu” and look like each other.

**It is possible for a client to have loose stool (diarrhea) and still have constipation or a bowel obstruction.**

Continued...



# Could This Happen in Your Facility or Program

## Medical Update



**Do you have the necessary staff training and procedures in place to reduce the likelihood of a bowel obstruction being detected too late?**

The following three case studies are taken from the records of client deaths reported to the Office of the Ombudsman for Mental Health and Mental Retardation.

### Case study #1:

A 42-year-old male, with mild mental retardation, personality disorder, duodenitis, hiatal hernia, hearing impairment, and other medical conditions, was transferred from a state facility to his community hospital after becoming acutely ill with ashen appearance and fever. The client had been having **nausea and vomiting** for 3-5 days. Within 5-10 minutes of his arrival at the Emergency Room, the client needed CPR. He was unable to be resuscitated. An autopsy showed that the client died because part of his small intestine had decayed due to a lack of circulation (infarction of the terminal ileum) due to a small bowel obstruction.

## Medical Update



The client was on 5 medications that can cause constipation: **Lipitor, Felbatol, Inderal, Aciphex, and Risperdal.**

### Case study #2:

An 8-year-old boy, with developmental delay, seizure disorder, cerebral palsy, and congenital hydrocephalus with a shunt, died of sepsis and toxic megacolon. He had lived with his parents and received PCA services. Three of the medications he received can cause constipation: **Dilantin, Lamictal, and Motrin (ibuprofen).**

## Medical Update



The child's father brought him to the clinic for a fever of 101.8°F. The fever had been occurring intermittently over the previous week. The patient was prescribed an antibiotic (along with his usual seizure meds) for possible ear infection. Children's Motrin had been used to control the temperature, but the patient was having some trouble getting his medication down.

When his doctor could find no reason for the continuing fever, the client was given another antibiotic for a possible sinus infection.

One day later, the child's mother called the doctor to say that he had **very little intake of food or fluids, no urine output, and increased frequency of stool.** The client was admitted to the hospital to be given IV fluids and for further evaluation. His **abdomen** was slightly **distended** (swollen), but not rigid, and there did not appear to be any tenderness. His doctor planned to continue IV fluids and antibiotics and to consider x-rays of the abdomen if the distension became worse.

## Medical Update



During the night, the patient continued to run elevated temperatures that required the use of a cooling blanket. The nurses reported that the child's **abdominal distention** became much worse, and the child had a guaiac positive emesis. (When the child vomited, his vomitus was tested and found to contain blood.) His doctor was called at 5:00 AM. The doctor ordered labs, a surgical consult, and an abdominal x-ray, but the child died at 5:27 AM.

### Case study #3:

A 48-year-old man, with schizophrenia, emphysema, hepatitis, and a seizure disorder, died of a small bowel obstruction, renal failure, and multisystem organ failure. Prior to his death he lived in his own apartment and received case management and job coordination services. He was taking 3 medications that can cause constipation: **Clozaril, Risperdal, and Cogentin.**

## Medical Update



He was admitted to the hospital with complaints of **cachexia (weight loss, poor nutrition, wasting), abdominal pain, and shortness of breath.** X-rays showed a small bowel obstruction. Medications were tried, but the client required surgery. Complications from his first surgery required a second surgery. The client was unable to recover from his surgeries and died.

P  
L  
E  
A  
S  
E  
  
P  
O  
S  
T



**Office of the Ombudsman for Mental Health and Mental Retardation**

Suite 420, Metro Square Bldg., St. Paul, Minnesota 55101-2117

(651) 296-3848 or 1-800-657-3506 TTY/voice - Minnesota Relay Service 1-800-627-3529

Web Site: <http://www.ombudmhdd.state.mn.us>