

PROTOCOL – VOMITING

(Date)

Re: (NAME)

D.O.B.:

(NAME) is a patient with mitochondrial disease with symptoms that include:

_____.

Vomiting is a common symptom in patients with mitochondrial disease when the gut is affected by the disorder. The impact can result in uncoordinated movement or dysmotility; regions of the gut can be affected to different degrees. This can result in problems that can include any of the following: swallowing incoordination, gagging or choking, gastroesophageal reflux, vomiting, delayed gastric emptying, bloating, abdominal pain, constipation and/or incomplete evacuation.

Infectious illnesses, surgical manipulation/disruption of the GI tract, and anesthesia can reduce motility further, usually transiently. The most common causes of slowed motility are viral illnesses, and vomiting likely occurs in part from increased gastro-esophageal reflux and/or delayed gastric emptying. Dehydration can also occur from a prolonged period of suboptimal fluid intake (without vomiting).

The following guidelines are recommended for patients who are vomiting or who cannot take in adequate fluids PO/enterally:

1. An intravenous line should be placed and IV fluids provided;
2. IV fluids should contain dextrose and electrolytes; do not administer Ringer's Lactate since patients with mitochondrial disease may have disturbed lactate metabolism;
3. For patients with a history of fasting intolerance and/or documented hypoglycemia, or if there is secondary disturbance in fatty acid oxidation, IV fluids should contain 10% dextrose with electrolytes to run at 1.25x maintenance or higher. The higher glucose solution is necessary to minimize catabolism and flux through an impaired fatty acid oxidation pathway. 10% dextrose is more effective than 5% dextrose in accomplishing this goal;
4. The patient might require admission until s/he is able to tolerate consistently fluids by mouth/enterally.

If there are any questions about these recommendations, do not hesitate to call.