Important Considerations of Bariatric Surgery
Provider Information Regarding Long-Term Medical Issues Related to Bariatric Surgery

As a bariatric surgeon, I understand that certain weight loss procedures performed have long-term medical consequences. I also understand that in this era of ever-expanding medical knowledge, it is difficult for every provider our patient interacts with to be an expert in long-term post-surgery care for the bariatric patient. This short handout has been developed in order to assist mutual providers in developing optimum care plans for postoperative bariatric surgery patients.

Symptom Considerations

- Abdominal pain in these patients can be vague and misleading. Symptoms that should be managed in conjunction with a bariatric surgeon include:
  - Fever
  - Tachycardia
  - Shoulder pain
  - Recurrent cramping pain in the upper abdomen
  - Disproportionate abdominal tenderness or pain
  - Shortness of breath (symptom of pulmonary embolism)
  - Vomiting
  - Dry heaves
  - Bloating with hiccups
  - Pain out of proportion to exam
  - Inability to tolerate liquids for 24 hours

  Note: Lower abdominal cramping is usually associated with constipation and can be confirmed with a KUB.
  Patients are encouraged to drink more water, as cramping often results from dehydration.

Medication Considerations

- **Extended-release and controlled-release** medications larger than an aspirin should be switched to a more immediate release formulation or extra doses throughout the day for the first month.
- **NSAIDS** (including aspirin and COX-2 inhibitors) should be avoided. There is an increased risk of gastric ulcerations in these patients.
- **Calcium citrate** is the required calcium replacement, as other calcium preparations aren’t adequately absorbed.
- **Potassium supplementation**, if required, should be given in liquid form for the first month.
- **Pill size** should be considered, as large pills may get stuck in the stomach pouch and cause ulceration.
- **Psychiatric medications** may require increased doses due to alterations in absorption. Extended release medication is not absorbed consistently.
- **Anticoagulant medication**: Absorption is variable and all medications need to be monitored very carefully. Coumadin absorption is unreliable and dosing will change as weight decreases. The patient has been asked to follow up with you as soon as possible.

Metabolic Considerations

- Roux-en-Y Gastric Bypass patients are at risk for micronutrient deficiencies (B12, Folate, Iron, Vitamin D, Calcium).
  - Patients must be on a multivitamin, B12 (sublingual, nasal, or IM), and calcium supplementation (at least 1,200-1,500 mg/day of calcium citrate) for the remainder of their lives.
- **Iron-deficiency anemia** is more common in these patients, particularly in menstruating women with concomitant menorrhagia.
  - Patients can usually be treated with oral iron supplementation, but occasionally require iron infusions.
- **Secondary hyperparathyroidism** may develop because of poor calcium uptake in gastric bypass patients.
- Weight may be regained. If more than 10% weight regain patient should be referred to our center. Often, the weight gain is associated with a mechanical problem that allows the patient to eat more.

Pregnancy

- Our female patients are advised to wait at least 18 months postoperatively before attempting to conceive.
- Should a patient become pregnant, it is important that she follow up immediately with our office, as there is a specific protocol she should follow.

Long-Term Follow-up

- Patients will have labs drawn by the Institute pre-operatively and then every six months for the first year and then drawn yearly thereafter. Labs drawn include: CBC, CMP, B12, Magnesium, Zinc, Iron, Ferritin, RBC Folate, B1, 25-OH Vit D, and PTH for gastric bypass patients. CBC, CMP, B12, B1, Magnesium and 25-OH Vit D for sleeve and band patients.
- Patients with Obstructive Sleep Apnea should stay on CPAP. Repeat sleep studies should be completed six months to one year after surgery in order to determine if the CPAP needs to be adjusted or discontinued.

Patients should visit with a bariatric surgeon annually for a review that should include labs, physical examination, and the latest information regarding their continuing care.