WEIGHT LOSS SURGERY CHEAT SHEET

PRE-OPERATIVE

CRITERIA


ASMBS: American Society for Metabolic and Bariatric Surgery

- BMI >40.
- BMI 35-40 with a SERIOUS obesity-related health problem such as type 2 diabetes, coronary heart disease, or severe sleep apnea (Will consider SEVERE HTN, DJD or ↑lipids).
- Acceptable operative risks per ACC guidelines.
- Ability to participate in treatment and long-term follow-up
- Ability to Exercise: “May be the most important factor that can help patients achieve long-standing and successful weight loss.”
- Demonstrates an understanding of the operation, risk s, benefits, and long term lifestyle changes (no dementia, cognitive impairment, learning disabilities).

Other:

- Up to date with age appropriate cancer screening.
- Normal TSH
- Maximize Diabetes control; ideal HbA1C < 8
- Needs to stop cigs/tobacco. HIGH risk serious GIB/ulcer.
- ETOH/dr bus if i i  of 1

POST OPERATIVE

FOLLOW UP -

Bariatric clinic:

RYGB/Sleeve: Post-op 2, 6wks, 3, 6, 12 mths then annually. -

LAGB: First fill 6wks. Routine 6, 12 mths, annually and pmn fill - needs. -

LABS: 6mths, annually: Chem 10, ALT, AST, PT, Albumin, -

Prealbumin, Ferritin, Iron/TIBC, CBC, Serum B12, RBC folate, B1, -

25 OH Vit D, PTH, Alk phos(metabolic bone disease) Vit A, -

glucose, lipids, HbA1c. Use “PNL BAR” in Order Entry in HC -

Consider copper deficiency if unresolved hypochromic anemia.

Meds: Actigall and Pepcid may be used in some patients.

ECONSULT REFERRAL

Patient will be triaged automatically to one of 4 centers (RCH, SSF, FRE, and Fresno)

EConsult: 3 options

- Referral for surgery: no prior operation who meets criteria
- Follow up prior operation: Pt needs basic education.

BARIATRIC CONSULT

Bariatric MD’s will determine whether patient is an appropriate candidate. They may request further medical or psychological work up / evaluation at the patient’s home facilities.

MEDICATIONS AFTERWARDS (RYGB and Sleeve)

NSAIDS: contraindicated LIFELONG due to risk bleed in relatively ischemic pouch and INACCESSIBLE remnant stomach

ASA: (those with MI/CVA), lowest possible dose and cover with PPI bid lifelong.

Prednisone: cover with PPI bid for as long as on Prednisone

GI Toxic Meds: (e.g. MTX). Consult with specialist re less GI toxic alternative, if not PPI bid for as long as on med.

Absorption: Presume altered, monitor levels if possible, if not monitor clinical effect. Dose may need adjustment.

Watch BirthControl/psych/anti-seizure meds.

Immunosuppressants: Increased risk Port infections.

Levothyroid: Follow closely post op as may mal-absorb.

May need dose adjustment

ETOH: increased risk ulcer, empty calories, addiction transference, increased risk intoxication/DUI.

VITAMINS AND SUPPLEMENTS (RYGB and Sleeve):


Deficiency: Vit A: increase to 10000 IU qd, Folate: 1000mg a day, Copper: 3mg a day, Zinc 60mg po qd short term.

Calcium CITRATE:

Carbonate will NOT be absorbed. 1500mg calcium daily in divided doses, usually 2 tabs TID or liquid equivalent.

Deficiency: consider as high risk for osteoporosis. Should have early DEXA.

Vit D: In Calcium +D (1200-1500iu) and 2 MVIs (800iu) PLUS vit D capsule 2000iu qd, minimum 4000 IU qd LIFELONG.

Deficiency: Mild (D 20-29); Baseline PLUS additional 2000 IU qd. Severe; Baseline PLUS 50000 IU a wk x 12-16 wks.

Vit B12: 3000mcg minimum a wk SL. Oral NOT absorbed. IM rarely needed. Serum B12 level should be > 400mcg/mL

Deficiency: 1000mcg SL a day. Repeat labs in 1 mth.

Vit B1: 50-100mg po QD. B complex ok. If excessive vomiting, increased risk deficiency and neurological symptoms.

Deficiency: rare in compliant pts. If mild and no symptoms 100mg po qd. If symptoms will need IV.Thiamine.

Iron: - ALL menstruating women as ferrous fumarate or ferrous gluconate, NOT ferrous sulfate (irritating to pouch). Not within 2 hrs of food, MVI, calcium, tea. (QHS good). Take with Vit C 500mg tab (NOT OJ). Aim for 50-100mg ELEMENTAL iron qd.

Initially just see low Ferritin without normal iron studies.

Deficiency: Ferrimin 150mg with Vit C at least 1-2 a day. Available only from; [www.dailyvite.net](http://www.dailyvite.net), 1 866 358 9773. CONTROL heavy menses.

Copper: Check for copper deficiency if Fe def anemia not responding to treatment.

Zinc: Check if excessive unresolved hair loss, dermatitis. Deficiency: 60mg po qd short term, Avoid long term, ulcerogenic and - inhibits copper absorption.
**Treatment of Common Problems with RYGB:**

- **Nausea/Vomiting:** Very common; Usually due to eating too much, too quickly or food intolerances. If persists consult Bariatric clinic.
  - **Abdominal Pain:** Often due to constipation and gas. Choose Ulcer in pouch or Stricture. Usually >3mths post op. STOP NSAIDS, CIGS or ETOH. Check H. Pylori, treat if not - treated in past. Trial PPI bid and Carafate QID. If not better refer back to Bariatric clinic for possible referral for EGD.
  - **Upper abdominal:** Often LUQ, no precipitating factors: Consider Internal hernia and Bowel obstruction. Refer to bariatric clinic.
  - **Assoc with fever and tachycardia:** Consider Leak (within 2wks of surgery). Emergent ER eval with Bariatric surgeon.
  - **Dumping:** 30mins after eating high sugar/fat food. Sweating, flushing, lightheadedness, tachycardia, palpitations, nausea, diarrhea, cramping. Food and Symptom log usually confirms. Responds to dietary modification with low sugar, high protein diet.
  - **Hypoglycemia:** 1-3 hours after eating high carb meal. Fasting glucose/insulin/cpeptide NORMAL. Post Prandial glucose <55mg/dl, - insulin >3uU/ml, cpeptide >0.6mg.ml. Food and Symptom log usually confirms. Responds to dietary modification. Meds such as - Acarbose or Somatostatin may be helpful if symptomatic despite dietary changes. Refer to Bariatric clinic if persists.
  - **Constipation:** Very common. Worse with Fe, Zn, protein deficiency. Ensure adequate protein (70gms/day). MVI with at least 15mg Zinc in it. Additional zinc can irritate the pouch. Avoid too much traction on hair. Full re-growth of hair is expected once weight loss stabilizes.
  - **Changes in taste and smell:** Foods that pt enjoyed before surgery may take on a new flavor and may not be as appealing. Sensitivity to smells such as food odors or perfumes is also common. Zinc deficiency can cause loss of taste.
  - **Weight Regain:** VERY RARLY surgical cause. UGI to rule out. Due to failure to maintain post surgical lifestyle; 1200cal a day diet PLUS 45minutes exercise a minimum 5 days a week. Stop snacking, grazing, liquid calories and increase exercise.

<table>
<thead>
<tr>
<th><strong>Type of Surgery</strong></th>
<th><strong>RYGB</strong></th>
<th><strong>Lap-Band</strong></th>
<th><strong>Sleeve Gastrectomy</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Details</strong></td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
<td><img src="https://via.placeholder.com/150" alt="Image" /></td>
</tr>
<tr>
<td><strong>Excess weight loss at 10 yrs</strong></td>
<td>50-80% (within one year)</td>
<td>40% (over 3 - 5 years)</td>
<td>50-80% (within one year)</td>
</tr>
<tr>
<td><strong>Reversible</strong></td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>30 day Mortality</strong></td>
<td>0.5-2%</td>
<td>0.1%</td>
<td>?</td>
</tr>
<tr>
<td><strong>PE (30% early mortality)</strong></td>
<td>1-3% (higher in open surgery)</td>
<td>1-1%</td>
<td>?</td>
</tr>
<tr>
<td><strong>Bleeding/Transfusion</strong></td>
<td>&lt; 1%</td>
<td>&lt; 1%</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td><strong>Dumping syndrome</strong></td>
<td>70% usually resolves after 1 yr</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Hernias</strong></td>
<td>up to 20% with open surgery (Most cases done laparoscopically)</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td><strong>Complications</strong></td>
<td>Cholecystectomy: 30%. Internal hernia/bowel obstruction 1-5% Anastomotic ulcer: 3-4% Stricture: 2-5% Leak: 1-3% (30% mortality) Wound infection: 3% lap, 7%</td>
<td>Port/tubing probs: .4 -7% Slippage/Prolapse: 2-14% Erosion: 0-5% Infection: 0.3-9% Port site pain Pseudoacalasia: 10% Re-operation: 20-30%</td>
<td>As a primary weight loss surgical procedure there is no long term data.</td>
</tr>
<tr>
<td><strong>Vitamin deficiencies without supplements</strong></td>
<td>Definite: advise LIFELONG supplements</td>
<td>Common: Advise MVI, B-complex, calcium plus D qd</td>
<td>Very Likely. Advise LIFELONG supplements</td>
</tr>
</tbody>
</table>

**LIFESTYLE AFTER WEIGHT LOSS SURGERY**

- **Weight regain:** 20%-30% patients at 10 yrs
  - Introduced 2001 in USA
  - No long term data
  - Usually due to dietary and exercise noncompliance
  - Surgical/anatomic causes RARE. NO surgical options except RARE cases with surgical cause.
  - Encourage pt to resume lifestyle changes: (appt with dietitian, exercise classes)

- **Diet**
  - Three WELL CHEWED, high protein (60-70gms/day), low fat meals a day
  - NO snacks
  - NO liquid calories (special coffees, fruit juices, sodas)
  - NO liquid WITH meals. Drink before meals.
  - Aim for approx 1200cal /day
  - At least 64oz non calorie fluids/day.

- **Exercise**
  - ESSENTIAL for weight loss and weight loss maintenance: AT LEAST 45 mins 5/7 days.

- **Support Group**
  - Post operative support group STRONGLY advised. Patients do better with regular attendance.