

Presenter Disclosure

Presenter: Ivy-Lea Anne Lunau, Patient

Relationships with commercial interests:

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Anemia in the Bariatric Patient

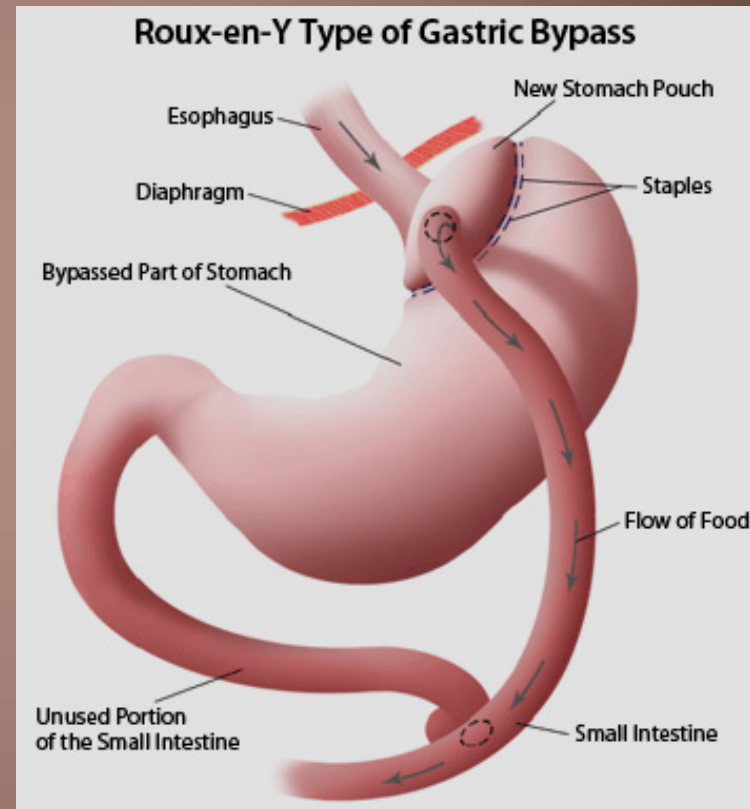
13th Annual Transfusion Medicine Education Videoconference Symposium
Pumping Iron – Strategies to Manage Iron Deficient Patients
From the Patient Perspective – Ivy-Lea Lunau
April 11, 2018

Introduction – Medical Background

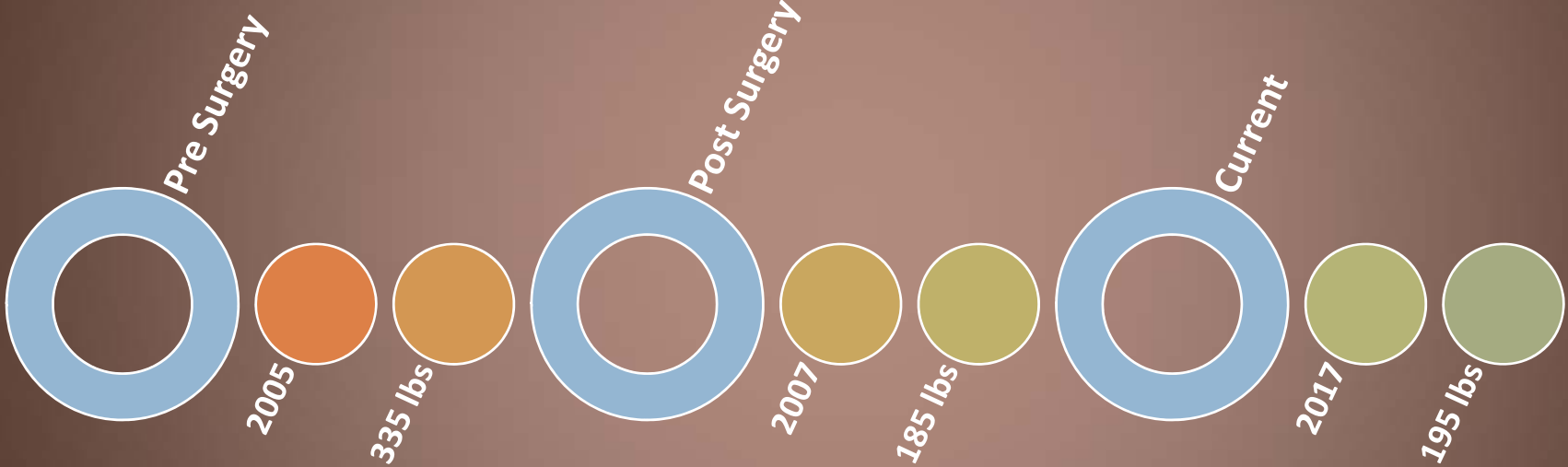
□ 42 Year old female

□ Gastric By-Pass Surgery 2005

- Roux-en-Y
- Laparoscopic
- Surgery in the U.S.



Successful Surgery





Pre-Surgery Education / Knowledge

- ❑ Family Doctor passed the referral for the surgery and had minimal knowledge and/or follow up later on
- ❑ Weight Loss Clinic at The Ottawa Hospital a wealth of information.
- ❑ Timelines in 2005 were 4 – 5 years. Opted to go out of country to Rochester, New York.
- ❑ Made aware that the following may be required post surgery:
 - ❑ B12 injections
 - ❑ Iron supplements



Post Surgery - Immediate

One week, Three Months, Six Months – with US Surgeon

- No Blood testing done
- No interaction with family doctor
- Advised to have family doctor monitor blood work every 6 months

One Year Visit

- Did not complete
- Purpose seemed to be more data gathering for the surgeon and clinic
- No perceived value for patient

Family Doctor

- 2 Family Doctors in the Past 12 Years
- Neither seemed very knowledgeable regarding Gastric By-Pass
- Patient had to advise one that NSAID'S can not be given to Gastric By-Pass Patients



Returning to Every Day Life

❑ Family Doctor monitored B12 and Iron levels

❑ B12

- ❑ No reported or recognized side effects of decreased B12 levels
- ❑ Advised of low numbers by family doctor and started receiving sporadic injections
- ❑ Given the dramatic weight loss, patient was experiencing increased activity, exercise etc.
- ❑ There was no base line for comparison as life activities due to the weight loss had changed so the usual side effects of decreased B12 levels went unnoticed or were also side effects / results of the Gastric Bypass
 - ❑ Weakness, Tiredness – Now able to do more than pre-surgery so no feeling of being weak or tired
 - ❑ Constipation, Diarrhea – Loose stools now a norm
 - ❑ Pale Skin – Actually began starting to stay out in the sun more
 - ❑ Loss of Appetite – Eating less now due to surgery so not experienced
 - ❑ Gas – Increased due to surgery



Returning to Every Day Life

❑ Iron

- ❑ No reported or recognized side effects of decreased Iron
- ❑ For years Family Doctor advised that should numbers continue to drop supplements would be needed
- ❑ No reported side effects
- ❑ There was no base line for comparison as life activities due to the weight loss had changed so the usual side effects of decreased Iron levels went unnoticed or were also side effects / results of the Gastric Bypass. In addition to the usual side effects of B12 which are also side effects low Iron
- ❑ Cold Hands/Feet – Entire body has always been cold. Light sweaters worn in the summer.



Post Surgery – Returning to Every Day Life

❑ Iron Continued...

- ❑ Iron Supplements (pill form) were prescribed at annual check ups
- ❑ The side effect of the iron supplement (constipation) however was very problematic.
- ❑ Seeing / feeling no individual noticeable side effect of having “low iron” other than being represented in blood tests versus the side effect of taking the iron supplement...would eventually stop taking the supplement every year
- ❑ Why take something that would cause a side effect to fix something that had no side effect? What is the benefit of that?



Blood Test Results...

Blood Testing Results

2007 – B12 – 127 / Iron – 11

2010 – B12 – 198 / Iron – 5

2012 – B12 – 451 / Iron – 8

2015 – B12 – 185 / Iron – 7

2008 – B12 – 212 / Iron – 11

2011 – B12 – 218 / Iron – 4

2013 – B12 – 241 / Iron – 7

2017 – B12 – 173 / Iron – 2

Hematologist Visit & Continued Follow Up

ADD IN 2017 2018 Blood Work from MyChart.ca



Summary – Iron & B12 Deficiency Symptoms

- ❑ **Identification of symptoms of Iron and B12 deficiency**
 - ❑ Given the side effects that normal patients would be able to express are also the same side effects as a result of the Gastric By-Pass AND
 - ❑ Given that increased activity and lifestyle changes as a result of the Gastric By-Pass and weight loss, a Gastric By-Pass patient's baseline for a lower level of tiredness is skewed
 - ❑ Therefore the patient perspective was that there were no symptoms of Iron and B12 deficiency other than numbers on the annual blood results and didn't effect the patient at all.



Risks Associated with Bariatric Surgery & Nutritional Anemia

❑ Response – 2005 – 2016 (0 - 11 Years Post Surgery)

- ❑ Known that malabsorption is minimal
- ❑ Understanding of malabsorption is minimal; no side effects
- ❑ 11 years post surgery “so the numbers are low” really does not effect you in a noticeable manner
- ❑ **Risk is virtually non-existent**; Especially considering the many benefits of the surgery

❑ Response – 2017+ (12+ Years Post Surgery)

- ❑ May 2017 – Low Hemoglobin (75) Caught family doctors attention and referral to Hematologist
- ❑ Stressful 2017; All side effects attributed to usual life post bariatric surgery and stressful situation. Even a new side effect of shortness of breath was attributed to a 15 lb weight gain
- ❑ Iron injections began in July 2017 – Weekly. By October 2017 – Bi-Weekly and in December moved to Monthly
- ❑ **Risk is minimal**; It took 12 years. From a healthcare cost perspective - more education and surgery specific explanations would greatly benefit



Best Practices to Prevent Anemia Post Bariatric Surgery

❑ Surgeon

- ❑ Doesn't seem practical for a Surgeon to do a 5 or 10 year post-op follow up.
- ❑ Anemia is well known as a side effect but one down that road that is not an immediate concern
- ❑ Surgeons are relying that indicators will be picked up during annual visits with family doctor
- ❑ Guides are provided post surgery to patients. One should be provided to family doctor as well

❑ Family Doctor

- ❑ Needs to become more aware of Gastric By-Pass patient needs
- ❑ Usual prescriptions of Iron Supplements taken orally are virtually useless. Find other options.

❑ Patient

- ❑ "Protein" on nutritional information labels are emphasized to select higher protein options. So too, with iron. Start from the beginning to not end up on a weekly basis in a medical day care unit for 1 – 4 hours

▪ QUESTIONS

THANK YOU