

Conception and Contraception in the Bariatric Patient 2019. A narrative review

Laurie Fasola MD, Ashley Waddington MD, MPA, Laura Gaudet MD, MSc , Bryden Magee MD, Boris Zevin MD, PhD

Department of Surgery, Gynecology and Obstetrics, Queens University, Kingston , Ontario, Canada



Introduction

Bariatric surgery is a well established treatment for Morbid Obesity and its comorbidities. 80% of patients who undergo these procedures are in reproductive age. The last formal update regarding recommendation for optimal time of conception and contraceptive options post bariatric surgery was performed in 2010. The purpose of this review is to provide an update on recommendations for conception and contraception following bariatric surgery.

Methods

We performed a non-systematic, narrative review with searches on Pubmed, UpToDate and Google scholar. Multiple combinations of MeSH headings were used. Articles in English and French from January 2004 until July 2019 were assessed. We reviewed systematic and non-systematic reviews, cross sectional studies, prospective and retrospective cohort studies, World Health Organization (WHO), European Association for the Study of Obesity (EASO) guidelines and the Canadian Fertility and Andrology Society 2018 recommendations.

Recommendations

Conception

1. **The optimal time to conception** should be when patient's weight stabilizes and BMI is ideally below 25 kg/m²; however, this may not be feasible for all patients. The recommended time to conception should be a **minimum of 12 months after surgery**.
2. All patients who have undergone LRYGB or duodenal switch should be checked for **gestational diabetes** during week 24-28 of pregnancy. The recommended method for testing is a **serial capillary blood test**. Avoid glucose tolerance testing as there is a risk of precipitating POST PRANDIAL HYPERINSULINEMIC HYPOGLICEMIA (PHH).
3. **All post bariatric surgery patients must be considered to have HIGH RISK pregnancy** and must be monitored by dietician, obstetrician and possibly perinatologist. They all require Folic acid supplementation 5mg PO Daily pre and during pregnancy, Iron (may need IV support), B complex, Calcium, Vitamin A (in beta carotene form), vitamin D.

All pregnant patients post RYGB or Duodenal Switch surgery who present with abdominal pain should be assessed by a general surgeon / bariatric surgeon

Contraception

For patients who have undergone Gastric Bypass and/or Biliopancreatic diversion with Duodenal switch:



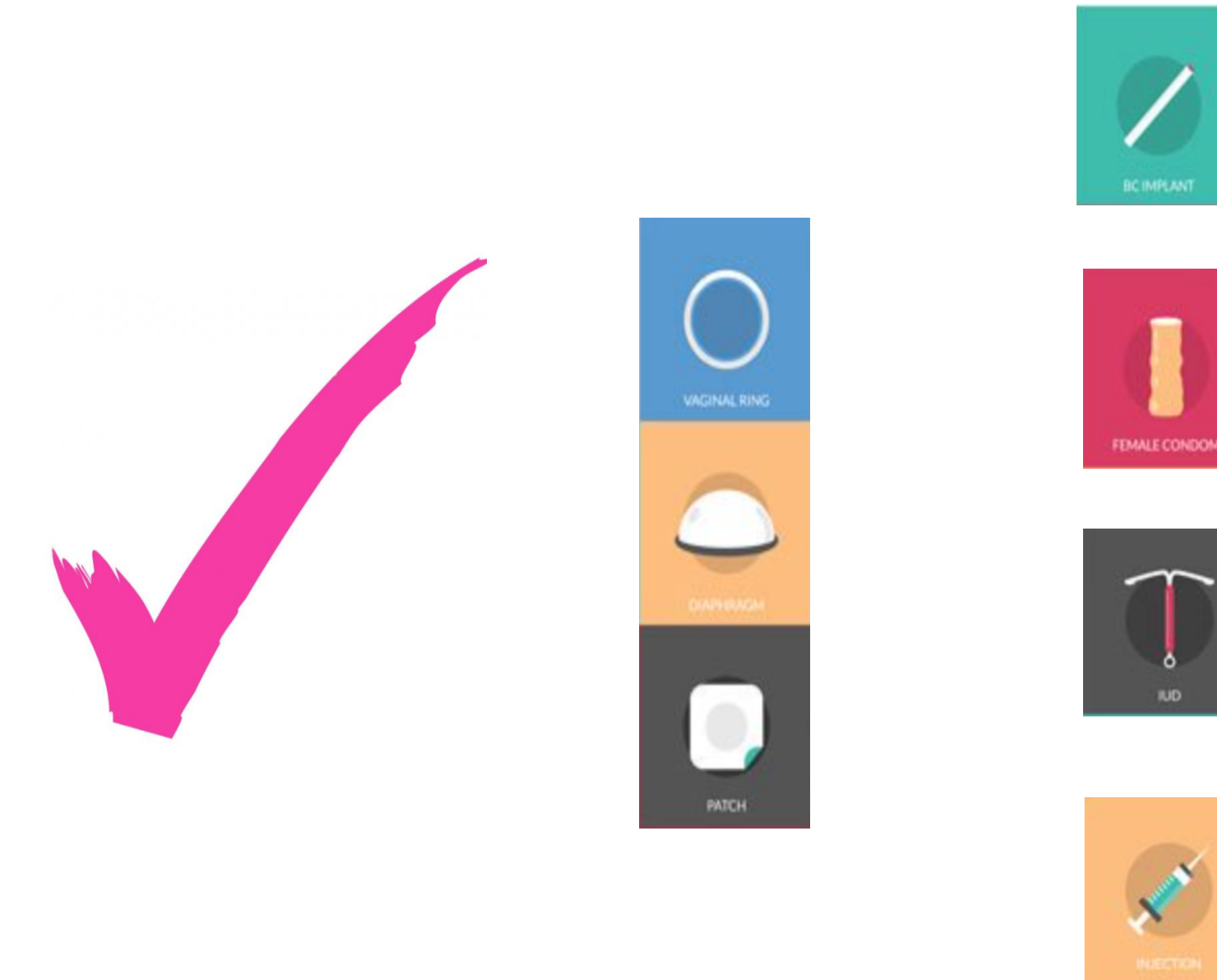
Avoid use of oral contraceptives.

The following contraceptive methods are recommended:

- 1- **Intra Uterine device (IUD) (with or without hormones), Contraceptive implants Medroxyprogesterone injections, Contraceptive patches*, contraceptive rings**
- 2- **Copper IUD is the recommended form of emergency contraception**

For patients who underwent Gastric sleeve or other purely restrictive bariatric procedure:

1. All Oral contraceptives can be used.
2. All emergency contraceptive methods can be used.
3. Same consideration about transdermal patch should be taken.



* Special comment on Transdermal hormonal patches: Since 2002 there have been no updates in literature about its efficacy. In the original transcript from Johnson and Johnson they noted a decrease in efficacy of their product as weight increased. It was proven that it was ineffective in preventing pregnancy in about 3.8% of population above weight of 90Kg (188Lbs) with a blood level variability of 20% between patients. The Canadian contraception Consensus does not restrict the use in patients over 90Kg since it is more effective than barrier methods.

Emergency Contraception

When using Emergency contraceptive methods, one should be aware of a **proven correlation between effectiveness of the method and patient's BMI**.

BMI Kg/m ²	Emergency Contraceptive to be used
< 25	Copper IUD or Levonorgestrel or Ulipristal
25.1-35	Copper IUD or Ulipristal
>35.1	Copper IUD or Ulipristal (unknown efficacy)

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Contact information:

Laurie Fasola MD FRCSC Bariatric /MIS Surgeon.
Laurie.fasola@mail.utoronto.ca

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