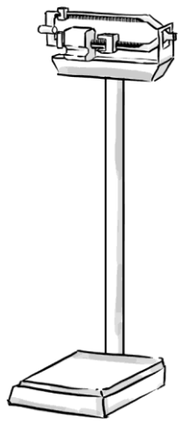
Special Population:

CONTRACEPTION FOR WOMEN WITH OBESITY



Safe and effective contraception is greatly needed by women with body mass indices (BMIs) of 30 kg/m^2 and above because of the increased risk of pregnancy-related complications. Obesity often has co-morbid conditions, such as cardiovascular disease, diabetes, gall bladder disease, and cancer. An increase in weight also has the potential to decrease the effectiveness of certain methods. For instance, increased metabolic rate results in the quick elimination of hormonal agents from the body, and increased blood volume that comes with an increase in weight can reduce blood levels of hormones. This condition potentially compromises contraceptive efficacy. The problem cannot be solved by simply doubling the dose of these hormones because such practice will obviously introduce significant health risks. Another important issue is whether a particular method (e.g., such as the use of oral contraceptive pills) actually causes further weight gain. Therefore, the selection of the most appropriate options poses a considerable challenge and requires a conscientious review of the current evidence that addresses these issues.

RECOMMENDED METHODS

Intrauterine devices (IUDs)

- These devices include copper-bearing IUD and levonorgestrel-releasing IUD.

Barriers

- Barriers include condoms, spermicides, diaphragm, and cervical cap.

IUDs and barriers are categorized as MEC 1 and have no restrictions for use in this population of patients, even among those less than 18 years of age.

Progestin-only contraceptives: progestin-only pills, depot medroxyprogesterone acetate (DMPA)/norethisterone enantate, levonorgestrel and etonogestrel implants

- These methods are categorized as MEC 1 and can therefore be used without restrictions by women with obesity.
- However, for women with obesity who are less than 18 years old, DMPA is categorized as MEC 2, considering the potential but reversible effects on bone mineral density.
- Therefore, women with obesity can generally use these agents with consideration of the potential reversible effects on bone mineral density.
- Evidence suggests the increased likelihood of weight gain among adolescent DMPA users with obesity compared with non-users with obesity, combined oral contraceptive (COC) users with obesity, and users with normal weight. (59

- Levonorgestrel implant (Jadelle) users who weigh more than 60 kg should be advised to return to their healthcare provider after four years (instead of five years) for implant replacement or for a new contraceptive method.(106) Levonorgestrel blood levels are lower for these women at the end of implant use compared with non-obese users and are inversely related to body weight. (105)
- Obese etonogestrel implant (Implanon) users should also be advised to return after two years for implant replacement or for a new contraceptive method.(55) Etonogestrel blood levels are also lower at the end of implant use for these women compared with non-obese users and are inversely related to body weight.
- Levonorgestrel exhibits a rapid decrease in efficacy with increasing weight. (102,104)

Combined hormonal contraceptives (CHCs): COC pills, combined injectable contraceptives, combined contraceptive patch, combined contraceptive vaginal rings

- The above agents are categorized as MEC 2 for women with obesity.
- These methods can generally be given because the advantages of use outweigh the risks.
- Compared with non-users with obesity, however, venous thromboembolism is likely to occur among those using these agents.
- Acute myocardial infarction, strokes, and weight gain as a result of the use of combined contraceptive pills do not appear to be more frequent for these women.
- The use of COCs and vaginal rings generally does not cause weight gain. For yet unknown reasons, some women do undergo weight changes with COC intake, but these changes appear to reverse upon discontinuation.
- The issue of whether the effectiveness of these methods is influenced by weight or BMI cannot be established at present.
- The use of the Yuzpe method in women with obesity has not been fully studied; thus, its use for emergency contraception in this population cannot be recommended.(102,104)

METHODS TO AVOID

Female Sterilization

- With severe obesity, caution is recommended before employing a procedure because of technical challenges.
- Additional precautions and preparations should be in place in secondary or tertiary hospitals.
- Fallopian tubes may be difficult to access through small incisions because of abdominal wall thickness.
- Associated complications, such as wound infections and breakdown, may also be increased.
- In addition, general or spinal anesthesia and its attendant risks are very likely.
- Prevention of airway obstruction and inadequacy of oxygen delivery are particularly challenging in patients with obesity.
- Alternatively, vasectomy can be offered to the partner.

NOTE: Some overweight women may benefit from employing natural methods of contraception because of the lack of systemic side effects. However, regular monitoring and testing cannot be overemphasized because these methods usually exhibit less effectiveness than other contraceptive options. For this reason, fertility awareness-based methods may not be appropriate for women with conditions that increase risks and dangers during pregnancy. Women with obesity, especially those with co-morbid medical conditions, are all likely to fall under this category.