Contraception in the Obese woman

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Slides Courtesy Jeff Jensen & Alison Edelman at OHSU

ESC 2018 Budapest

Overview

• Background
• LARCs
• New Formulations
• Oral Contraception
• Emergency Contraception
• Conclusions

DEFINITIONS

• Underweight 18.5 kg/m²
• Normal 18.5 – 24.9 kg/m²
• Overweight 25 – 29.9 kg/m²
• Obese 30 – 39.9 kg/m²
• Class I 30 – 34.9 kg/m²
• Class II 35 – 39.9 kg/m²
• Very obese 40 kg/m² or otherwise referred to as severe, extreme, morbid or Class III obesity.

Age-Adjusted Prevalence of Obesity in Americans Ages 20-74 by Sex and Survey Year


Note: Obesity is defined as a BMI of 30.0 or higher.

Source: CDC/NCHS.

Obesity Rates Projected to Double Over the Next 30 Years

Source: www.steviafirst.com/stevia/stevia-market

Slide Courtesy Jeff Jensen
LARC methods are safe and effective in obese women

- No difference in efficacy for implants or IUDs btw obese and non-obese women
- No added VTE risk
- Placement of IUD may be difficult in some obese women
- Endometrial protection with LNG IUS

IMPLANT: Etonogestrel: pharmacokinetics

- Plasma levels 31-63% lower in obese vs normal weight
- Clinical data at present do not indicate a decreased efficacy in obese women but caution is recommended.

Vaginal Ring in non-obese and obese Women

New Contraceptive Rings

- NES/E2 Vaginal Ring
- Phase 2a completed;
- Full suppression of ovulation
- Replacement of E2 at follicular levels
- Phase 2b study enrolls women with BMI <35

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Combined OCs failure by BMI: INAS study

\[ \text{aHR} 1.5 \ (95\% \ CI 1.3, 1.8) \] for contraceptive failure BMI \( \geq 35 \ \text{kg/m}^2 \) versus <35 kg/m²

Slide Courtesy Jeff Jensen
Risk of failure in obese women using LNG Emergency contraception

<table>
<thead>
<tr>
<th>Weight (kg)</th>
<th>Observed PPR (95% CI)</th>
<th>Adjusted OR</th>
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<tbody>
<tr>
<td>&lt;30</td>
<td>1.6% (1.1–2.3)</td>
<td>1</td>
</tr>
<tr>
<td>≥ 30</td>
<td>3.1% (1.6–5.5)</td>
<td>2.1 (1.0–4.3)</td>
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Decrease in UPA efficacy not observed below 85 kg!


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European Society of Contraception Statement on Contraception in Obese Women

Gabriele S. Merki-Feld, Sven Skouby, David Serfaty, Medard Lech, Johannes Bitzer, Pier Giorgio Crosignani, Angelo Cagnacci and Regine Sitruk-Ware

TAKE HOME MESSAGES

• LARC work better for preventing pregnancy in all women, no matter their weight.
• Obesity affects pharmacokinetics of contraceptive steroid hormones. The actual impact on effectiveness is unclear.
• Use IUD or Ulipristal Acetate in obese women for EC
• Consider continuous dosing for obese COC users

TAKE HOME MESSAGES

• Novel methods of contraception safe and effective are needed
• Currently Progestin-only methods and IUDs are in category 1 for Obese Women
• Combined OC are in Category 2, but may be used when others are not available or not accepted

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