Obesity in O&G – The new Tsunami

MONIQUE STRAVENS
<table>
<thead>
<tr>
<th>Weight Categories</th>
<th>BMI (kg/m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt; 18.5</td>
</tr>
<tr>
<td>Healthy Weight</td>
<td>18.5-24.9</td>
</tr>
<tr>
<td>Overweight</td>
<td>25-29.9</td>
</tr>
<tr>
<td>Obese</td>
<td>30-34.9</td>
</tr>
<tr>
<td>Severely Obese</td>
<td>35-39.9</td>
</tr>
<tr>
<td>Morbidly Obese</td>
<td>≥40</td>
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</tbody>
</table>
New Zealand one of world’s three most obese nations

New Zealand retains bronze in OECD obesity stakes

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Figure 1: Obesity among adults, 2015 or nearest year

www.oecd.org/health/health-data.htm
Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

New Zealand the world’s third most obese nation

Mexico for worldwide rates professionals are calling for of the food and beverage

Photograph: Dominic Lipinski/PA
BULK OF THE NATION

Percentage of males and females who are overweight or obese

69% males
60.6% females

1% are underweight
34% are normal weight
37% are overweight
28% are obese

TRENDS
1997 - 2008/09
(Percentage points)

OVERWEIGHT
1% 2.9%

OBESE
10.7% 7.2%

SCIENCE MEDIA CENTRE
DATA: NEW ZEALAND ADULT NUTRITION SURVEY (2011) BASED ON BMI FOR ADULTS ≥16 YEARS
When and how affected?

- Childhood
- Adolescent
- Reproductive years
- Pregnancy
- Beyond the reproductive years
- Menopause transition
Obesity in childhood

- Maternal obesity and gestational weight gain associated with childhood obesity, and this effect extends into adulthood

- Increased chances of later life obesity and its complications

- 80% risk of childhood obesity if both parents obese vs 10%

- Maternal obesity independently associated with neurodevelopment delay
  \((Girchenko \ et \ al, \ 2018)\)
Adolescent

- High BMI scores at age 3 risk factor for early onset of puberty
- Early puberty associated with diabetes cardiovascular events later in life
- Breast cancer risk
- Psychological risks
Reproductive years

- Longer time to conception due to ovulatory disorders

- PCOS often co-exists and obesity causes deterioration of hormonal and metabolic parameters

- Less favourable outcomes with assisted reproduction
  - respond poorly to ovulation induction
  - lower pregnancy rates with Gonadotrophins, need higher doses

- Higher miscarriage rates (spontaneous and assisted) including recurrent miscarriage
Pregnancy

FETAL RISK

- congenital abnormalities
- large for gestational age
- shoulder dystocia
- IUFD

MATERNAL RISK

- GDM
- HTN
- obstetric intervention
- Anaesthetic complications
- PPH
- Lactation difficulties
- VTE
And beyond

- Contraception difficulty
  - COCP – VTE risk, ? Less effective
  - Depot Provera – weight gain
  - Levonorgestrel implant – ? decreased effectiveness at 5 years

- Menstrual difficulties due to anovulatory cycles; irregular, heavier, longer

- Endometrial polyps

- Fibroids

- Stress urinary incontinence

- Pelvic organ prolapse
Menopause transition

- Longer menopause transition
- Final menstrual period later
- More symptomatic
- Weight gain
- Changes in fat distribution
- ??HMT
Risk of malignancy

- Increased risk of endometrial, breast (postmenopausal), ovarian & colon cancer
Risk of malignancy

- Increased insulin resistance, hyperinsulinaemia, angiogenesis
- Adipokines
- Oestriadiol
Treatment consideration

- High risk of perioperative complications – anaesthetic & surgical. Consider indication for surgery, inform patients of risk, careful planning.

- Outcomes similar with increased weight but significant differences with BMI approaching 40. Risks particularly high if cardiovascular co-morbidities present (Glance et al, 2010)

- Obese: OR 1.50; C 1.35-1.66
- Morbid Obese: OR 1.61; CI 1.38-1.89
- Super Obese: OR 2.73; CI 2.26-3.30
Treatment consideration

- Minimal access surgery best. Improved outcome achievable with laparoscopic surgery in experienced hands.
Questions?