Advanced Maternal Age
Family Medicine Obstetrics Grand Rounds

September 20, 2018
Conflicts of Interest

- I do not have an affiliation (financial or otherwise) with any for-profit or not-for-profit organizations.
Objectives

- What is advanced maternal age (AMA)?
- How should we counsel women who are AMA?
- What are associated risks?
- How should we manage women who are AMA?
Why is this important?
Fertility

Women’s Age vs Fertility

• Age 15-19: 14.2%
• Age 20-24: 51.2%
• Age 25-29: 100.6%
• Age 30-34: 107.0%
• Age 35-39: 50.6%
• Age 40-44: 9.2%
• Age 45-49: 0.4%

*Fertility rate = # live births /1000 women*

Source: Statistics Canada, 2016
Health Advantages

• Folic acid
• Purposeful approach and readiness
• Higher breastfeeding rates
• Socioeconomic influence
How should we counsel women who are AMA?
Preconceptual Counseling

• Informed decision-making
  – ↑ pre-existing health conditions
  – ↑ alcohol usage and work hours
  – Age-related subfertility
  – Environmental toxicity exposure
  – Obstetrical and perinatal risks

• Folic acid supplementation
Fertility

SOGC suggests offering fertility evaluations:

• <35: after 1 year of attempted conception in the absence of known cause of infertility
• 35-37: after 6 months
• >37 or those with chronic medical conditions: earlier than 6 months
Assisted Reproductive Technologies

• ART technologies can accelerate the time to conception
  – Do not compensate for natural decline of fertility due to age

• Goals of ART:
  – Increase monthly fecundity
  – Decrease time to conception
ART and AMA

Moaddab et al, 2017

• Population level analysis, 2011 – 2014, 101,494 live births by women ≥ 40 vs < 40 years by ART from CDC data

• Increased risk:
  – Gestational hypertension, gestational diabetes, eclampsia, unplanned hysterectomy, ICU admission
Table 2
Early maternal outcomes, medical, and obstetrics complications for ART pregnancies with regards to maternal age, United States, 2011–2014.***

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Maternal age &lt; 40</th>
<th>Maternal age 40–44</th>
<th>Maternal age 45–49</th>
<th>Maternal age ≥ 50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gestational hypertension</td>
<td>8343 (10.5)</td>
<td>2061 (12.7)</td>
<td>724 (15.6)</td>
<td>149 (16.8)</td>
</tr>
<tr>
<td>Gestational diabetes</td>
<td>7635 (9.6)</td>
<td>1919 (11.9)</td>
<td>645 (13.9)</td>
<td>119 (13.5)</td>
</tr>
<tr>
<td>Eclampsia</td>
<td>423 (0.5)</td>
<td>123 (0.8)</td>
<td>36 (0.8)</td>
<td>11 (1.2)</td>
</tr>
<tr>
<td>Chorioamnionitis</td>
<td>1843 (2.3)</td>
<td>336 (2.1)</td>
<td>105 (2.3)</td>
<td>12 (1.4)</td>
</tr>
<tr>
<td>Method of delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spontaneous vaginal</td>
<td>28,787 (36.1)</td>
<td>4385 (27.1)</td>
<td>923 (19.9)</td>
<td>173 (19.6)</td>
</tr>
<tr>
<td>Operative vaginal</td>
<td>3241 (4.1)</td>
<td>566 (3.5)</td>
<td>134 (2.9)</td>
<td>18 (2.0)</td>
</tr>
<tr>
<td>Cesarean</td>
<td>47,685 (59.7)</td>
<td>11,218 (69.3)</td>
<td>3577 (77.1)</td>
<td>694 (78.4)</td>
</tr>
<tr>
<td>Unknown</td>
<td>73 (0.1)</td>
<td>17 (0.1)</td>
<td>3 (0.1)</td>
<td>0</td>
</tr>
<tr>
<td>Ruptured uterus</td>
<td>30 (0.04)</td>
<td>10 (0.06)</td>
<td>2 (0.04)</td>
<td>1 (0.11)</td>
</tr>
<tr>
<td>Unplanned hysterectomy</td>
<td>134 (0.2)</td>
<td>71 (0.4)</td>
<td>35 (0.8)</td>
<td>6 (0.7)</td>
</tr>
<tr>
<td>ICU admission</td>
<td>362 (0.5)</td>
<td>120 (0.7)</td>
<td>47 (1.0)</td>
<td>9 (1.0)</td>
</tr>
<tr>
<td>Maternal transfusion</td>
<td>1065 (1.3)</td>
<td>234 (1.5)</td>
<td>94 (2.0)</td>
<td>18 (2.1)</td>
</tr>
</tbody>
</table>

*Data are reported as number (proportion) and mean ± standard deviation.

**All relationships are significant (P < 0.001).
ART and AMA

Moaddab et al, 2017

• ART in AMA not associated with:
  – Increased risk of chromosomal disorders, anencephaly, Down’s syndrome, gastroschisis, neural tube defects, omphalocele, CHD, cyanotic heart defects
What are the risks of being pregnant at an older age?
Maternal Risks

- Exacerbation of pre-existing medical conditions
- Ectopic pregnancy
- Placenta previa
- Breech position
- Caesarean delivery
- Multiples
- Mixed data on placenta abruption
## Gestational Diabetes

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rate</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>1.37%</td>
<td>1 out of 73</td>
</tr>
<tr>
<td>20-34</td>
<td>4.11%</td>
<td>1 out of 24</td>
</tr>
<tr>
<td>35-39</td>
<td>8.06%</td>
<td>1 out of 12</td>
</tr>
<tr>
<td>40+</td>
<td>11.82%</td>
<td>1 out of 8</td>
</tr>
</tbody>
</table>

Caesarean delivery

- \(\geq 35\): 44% higher rates than women 20-34
- \(\geq 40\): 1 in 3 women have c-sections
- First time mothers \(\geq 40\): 1 in 2 women have c-sections

Assisted delivery

- Forceps / vacuum extraction rates 28% higher in \(\geq 35\) than 20-34
- Placental abruption 60% higher in \(\geq 40\)
Rates of assisted vaginal delivery

## Placenta Previa

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rate</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>0.12%</td>
<td>1 out of 833</td>
</tr>
<tr>
<td>20-34</td>
<td>0.48%</td>
<td>1 out of 208</td>
</tr>
<tr>
<td>35-39</td>
<td>1.03%</td>
<td>1 out of 97</td>
</tr>
<tr>
<td>40+</td>
<td>1.55%</td>
<td>1 out of 65</td>
</tr>
</tbody>
</table>

Fetal Risks

- Preterm delivery
- Low birth weight
- SGA
- Increased aneuploidy, non-chromosomal abnormality, and congenital anomaly
- Stillbirth
Preterm Delivery

## Aneuploidy

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rate</th>
<th>Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20</td>
<td>0.10%</td>
<td>1 out of 1000</td>
</tr>
<tr>
<td>20-34</td>
<td>0.10%</td>
<td>1 out of 1000</td>
</tr>
<tr>
<td>35-39</td>
<td>0.27%</td>
<td>1 out of 370</td>
</tr>
<tr>
<td>40+</td>
<td>0.79%</td>
<td>1 out of 127</td>
</tr>
</tbody>
</table>

Down Syndrome

Rates at 10 weeks GA:
• 1 in 1,064 at age 25
• 1 in 686 at age 30
• 1 in 240 at age 35
• 1 in 53 at age 40
• 1 in 19 at age 45

Rate at term:
• 1 in 1,340 at age 25
• 1 in 939 at age 30
• 1 in 353 at age 35
• 1 in 85 at age 40
• 1 in 35 at age 45

(Haddow, Palomaki et al. 2009)
Stillbirth

Huang et al, 2008

• 24 out of 31 studies: older women more likely to have a stillbirth than younger women

• Risk of stillbirth x 1.2 to 2.23 higher (developed countries)
  – Not due to other known risk factors/confounders i.e. smoking, other medical problems, race, prenatal care, BMI, education level, primiparous status
Stillbirth

Limitations (Huang et al):

• Large variances in:
  – Methodologies of studies
  – Population (low vs high risk)
  – Definition of AMA (>35 vs >40)
  – Inclusion of other risk factors for stillbirth
  – Definition of stillbirth (antepartum vs intrapartum)

• Data from more than 20 years ago

• Lack of risk calculations per year of age
Stillbirth

Jolly et al, 2000

- UK, 1988-1997, 18 hospitals, 358 120 women
  - Controlled for age, BMI, ethnic group, medical issues, primiparous status
  - Stillbirth not defined – any GA > 20-28 weeks

- Rates of stillbirth:
  - 18-34: 0.47 % (4.7 / 1000)
  - 35-40 0.61 % (6.1 / 1000)
  - ≥ 40 0.81 % (8.1 / 1000)
Stillbirth

Jacobsson, Ladfors et al, 2004

- Sweden, 1987-2001, 18 hospitals, 909 228 births
  - Compared perinatal death rate between women 20-29 vs women ≥ 40
  - Perinatal birth: stillbirth or newborn up until 28d of age

- Rates of stillbirth:
  - 20-29: 0.6 % (6 / 1000)
  - 40-44 1.08 % (10.8 / 1000)
  - ≥ 45 1.66 % (16.6 / 1000)
Stillbirth

Reddy et al, 2006

- US, 2001-2002, 5.5 million singleton pregnancies without birth defects
  - Compared stillbirth rates, maternal age, and whether risk was higher for primiparous vs multiparous women

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Primiparous women</th>
<th>Multiparous women</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 35</td>
<td>3.72</td>
<td>1.29</td>
</tr>
<tr>
<td>35-39</td>
<td>6.41</td>
<td>1.99</td>
</tr>
<tr>
<td>≥ 40</td>
<td>8.65</td>
<td>3.29</td>
</tr>
</tbody>
</table>

Rates are per 1000 ongoing pregnancies.
Stillbirth

Reddy et al, 2006
## Stillbirth

<table>
<thead>
<tr>
<th>Maternal age</th>
<th>Absolute Risk (per 1000 ongoing pregnancies)</th>
<th>Relative risk of stillbirth (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;35</td>
<td></td>
<td>&lt;35</td>
</tr>
<tr>
<td>≥40</td>
<td></td>
<td>≥40</td>
</tr>
<tr>
<td>37-41 weeks</td>
<td>N/A</td>
<td>1.0</td>
</tr>
<tr>
<td>37-38 weeks</td>
<td>0.61</td>
<td>1.0</td>
</tr>
<tr>
<td>39-40 weeks</td>
<td>0.98</td>
<td>1.0</td>
</tr>
<tr>
<td>41 weeks</td>
<td>0.75</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Reddy et al, 2006
Stillbirth

Haavaldsen et al, 2010

- Norway, 1967-2006, 2.1 million pregnancies
  - Compared risk of stillbirth by gestational age among younger and older women
Number of stillbirths per 1000 ongoing pregnancies; data from 1967-2006

<table>
<thead>
<tr>
<th>GA</th>
<th>Age 20-24</th>
<th>Age 35-39</th>
<th>Age 40+</th>
</tr>
</thead>
<tbody>
<tr>
<td>16+0 to 22+6</td>
<td>2.1</td>
<td>4.75</td>
<td>7.07</td>
</tr>
<tr>
<td>23+0 to 29+6</td>
<td>2.31</td>
<td>2.53</td>
<td>3.44</td>
</tr>
<tr>
<td>30+0 to 37+6</td>
<td>2.51</td>
<td>3.25</td>
<td>5.72</td>
</tr>
<tr>
<td>38+0 to 39+6</td>
<td>1.16</td>
<td>1.53</td>
<td>2.93</td>
</tr>
<tr>
<td>40+0 to 41+6</td>
<td>1.62</td>
<td>2.59</td>
<td>4.17</td>
</tr>
<tr>
<td>42+0 to 43+6</td>
<td>2.82</td>
<td>5.8</td>
<td>12.37</td>
</tr>
</tbody>
</table>

Haavaldsen et al, 2010
### Number of stillbirths per 1000 ongoing pregnancies; data from 1967-2006

<table>
<thead>
<tr>
<th>GA</th>
<th>Age 20-24</th>
<th>Age 35-39</th>
<th>Age 40 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>16+0 to 22+6</td>
<td>2.1</td>
<td>4.75</td>
<td>7.07</td>
</tr>
<tr>
<td>23+0 to 29+6</td>
<td>2.31</td>
<td>2.53</td>
<td>3.44</td>
</tr>
<tr>
<td>30+0 to 37+6</td>
<td>2.51</td>
<td>3.25</td>
<td>5.72</td>
</tr>
<tr>
<td>38+0 to 39+6</td>
<td>1.16 / 0.65</td>
<td>1.53 / 1.1</td>
<td>2.93 / 1.39</td>
</tr>
<tr>
<td>40+0 to 41+6</td>
<td>1.62 / 0.84</td>
<td>2.59 / 1.91</td>
<td>4.17 / 1.61</td>
</tr>
<tr>
<td>42+0 to 43+6</td>
<td>2.82 / 1.77</td>
<td>5.8 / 3.79</td>
<td>12.37 / 2.64</td>
</tr>
</tbody>
</table>

Haavaldsen et al, 2010
Stillbirth

Bahtiyar et al, 2008

• Mathematical model showed that the cumulative risk of stillbirth at 38-39 weeks in women aged 40-44 was similar to the risk in women 25-29 at 41-42 weeks
Why does the risk of stillbirth increase in older women?

• Increased risk of uteroplacental insufficiency
  – No good evidence!
  – Literature shows no significant difference in rates of IUGR, fetal distress, Caesarean of fetal distress or other clinical markers of aging placenta in women ≥ 35 vs younger women
  – Froen, Gardosi et al, 2004: no difference in IUGR between women ≥ 35 and younger women
  – Seoud, Nassar et al, 2002: 2/3 stillborn babies in women ≥ 40 had no risk factors other than age
Why does the risk of stillbirth increase in older women?

• ? Aging-related health problems
  – Huang et al, 2008: increased risk of stillbirth in women ≥ 35 after accounting for risk factors

• ? Unknown
How should we manage women who are AMA?
Obstetrical Management

- Address pre-existing health concerns
- Manage prenatal complications if and when they present
- Prenatal screening for aneuploidy
- Fetal health surveillance
- Induction of labour
### Genetic Screening Tests

<table>
<thead>
<tr>
<th></th>
<th>eFTS</th>
<th>NIPT</th>
<th>MSS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Components</strong></td>
<td>1) PlGF, AFP, PAPP-A, bHCG</td>
<td>Cell-free fetal (cff) DNA</td>
<td>AFP, uE3, total HCG, inhibin</td>
</tr>
<tr>
<td></td>
<td>2) US for NT</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gestational age</strong></td>
<td>11 to 13+6</td>
<td>&gt; 9 to 10</td>
<td>15 to 20+6</td>
</tr>
<tr>
<td><strong>Detection rate</strong></td>
<td>85-90%</td>
<td>99%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>False positive rate</strong></td>
<td>3-6%</td>
<td>&lt; 0.1%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Abnormalities screened for</strong></td>
<td>Trisomy 21, 18</td>
<td>Trisomy 21, 18, 13, X, Y</td>
<td>Trisomy 21, 18, ONTD</td>
</tr>
</tbody>
</table>
NIPT — OHIP coverage:

- Maternal multiple marker screen test positive for aneuploidy
- ≥ 40 years old at EDB
- Previous child with aneuploidy
- Fetal NT ≥ 3.5 mm
Routine Care

• 1\textsuperscript{st} trimester ultrasound (11-14 wks)
  – Viability, gestational age, # fetuses, chorionicity in multiples, early anatomic assessment, NT

• 2\textsuperscript{nd} trimester ultrasound (18-22 wks)
  – Structural anomalies
## Genetic Diagnostic Test

<table>
<thead>
<tr>
<th></th>
<th>Amniocentesis</th>
<th>Chorionic Villus Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>GA</td>
<td>15-17 weeks</td>
<td>11-13 weeks</td>
</tr>
<tr>
<td>Miscarriage Risk</td>
<td>0.25% (1/400)</td>
<td>1% (1/100)</td>
</tr>
<tr>
<td>Fetal anomaly risk</td>
<td>No risk</td>
<td>Limb reduction &lt; 9 weeks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Possible hemangioma</td>
</tr>
<tr>
<td>% success</td>
<td>&gt;99%</td>
<td>&gt;99%</td>
</tr>
<tr>
<td>Time to diagnosis</td>
<td>QI-PCR 2-3 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Microarray 2 weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single gene test 2-6 weeks</td>
<td></td>
</tr>
<tr>
<td>Accuracy</td>
<td>Highly accurate for RAD</td>
<td>98-99%</td>
</tr>
<tr>
<td></td>
<td>Chromosomal study: 99.9%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>AF leakage (talipes at 15-16 weeks)</td>
<td>No significant risks</td>
</tr>
<tr>
<td>Post-procedural risks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Fetal Health Surveillance

Fretts et al, 2004

• Decision analysis based on unexplained fetal deaths from McGill Obstetrical Neonatal Database

• Prediction: antepartum testing with IOL after a positive test (one antepartum test qweekly, any kind, >37 weeks GA) was the most successful in reducing the number of unexplained stillbirths
  – Also associated with the highest induction rate

• For nulliparous ≥ 35 yo:
  – 863 antepartum tests and 71 additional inductions to prevent 1 unexplained stillbirth
Fetal Health Surveillance

Fox et al, 2013

• Chart review of 1541 women ≥ 35 yo vs. 2928 women <35 yo
  – BPP qweekly at 36 weeks onward and delivery by 41 weeks GA for women ≥ 35 yo

• No statistical difference in the rate of stillbirth
  – ≥35 group had higher IOL rate (18.5% vs 15.8%) with earlier delivery (38.4 vs 38.9 weeks)
Fetal Health Surveillance

Levine et al, 2015

- Retrospective cohort of 276 women ≥ 40 yo exposed (129) vs unexposed (147) to antenatal surveillance
  - Twice weekly NST and fluid assessment at 32 wks
- No significant difference in intervention rates
  - CS rate higher for exposed group (53 vs 39%)... but was not significant when controlling for those with previous CS
  - Induction rate not significantly different
- No significant difference in stillbirths (total # = 3)
Fetal Health Surveillance

Per SOGC CPG No. 197 (Fetal Health Surveillance: Antepartum Consensus Guideline)

• Daily monitoring of FM from 26-32 weeks in all pregnancies with risk factors
  – AMA associated with increased perinatal morbidity / mortality

• <6 distinct movements / 2 hours needs further testing = NST +/- BPP
  – If NST normal (and no risk factors) ➔ continue daily FM count
  – If NST normal + risk factors or suspect IUGR/ oligohydramnios ➔ BPP or fluid assessment / 24 hours
  – If NST abnormal ➔ BPP / fluid asap
Fetal Health Surveillance

• NST
  – Considered when risk factors for adverse perinatal outcome are present
  – If normal NST, fetal movements, and no suspected oligo → not necessary to conduct BPP

• BPP
  – Recommended when risk factors present and evaluation of fetal well-being required
Fetal Health Surveillance

• Umbilical Artery Doppler
  – Should not be used as a screening tool in healthy pregnancies
  – Should be available for assessment of fetal placental circulation with suspected placental insufficiency
Fetal Health Surveillance

- Uterine Artery Doppler

### Table 8. Indications for uterine artery Doppler at 17 to 22 weeks

<table>
<thead>
<tr>
<th>Previous obstetrical history</th>
<th>Risk factors in current pregnancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous early onset gestational hypertension</td>
<td>Pre-existing hypertension</td>
</tr>
<tr>
<td>Placental abruption</td>
<td>Gestational hypertension</td>
</tr>
<tr>
<td>Intrauterine growth restriction</td>
<td>Pre-existing renal disease</td>
</tr>
<tr>
<td>Stillbirth</td>
<td>Longstanding Type I diabetes with vascular complications, nephropathy, retinopathy</td>
</tr>
<tr>
<td></td>
<td>Abnormal maternal serum screening (hCG or AFP &gt; 2.0 MOM)</td>
</tr>
<tr>
<td></td>
<td>Low PAPP-A (consult provincial lab for norms)</td>
</tr>
</tbody>
</table>
Fetal Health Surveillance

Society for Maternal and Fetal Medicine (2012): *Advanced maternal age and the risk of antepartum stillbirth*

“It is currently unclear what the optimal management is for women ≥ 35 years to prevent stillbirth...

There is insufficient evidence to confirm that antenatal testing for the sole indication of AMA reduces stillbirth or improves perinatal outcomes...

The potential benefits of routine antepartum testing needs to be weighed against the potential harm of increased interventions, iatrogenic delivery, labor induction, and possibly caesarean section.”
Induction of Labour

Walker, Bugg et al, 2016

- RCT, 2012-2015, 600 women ≥ 35 yo, 42 hospitals
  - IOL 39+0 to 39+6 weeks vs. waiting then IOL at 41-42 weeks
  - Induction group: 78% induced
  - Not induced group: 46% spontaneous labour, 49% induced
Induction of Labour

Walker, Bugg et al, 2016

• No difference in Caesarean rates (32-33% both)
• No difference in complication rates for mothers
• No difference in average birth weight, Apgar scores, umbilical cord pH levels, NICU admissions, low blood oxygen, or need for interventions (i.e. tube feeding, O2)
• No stillbirths or deaths in either group
Induction of Labour

Nicholson, Kellar et al 2006

• Chart review, 15,036 low-risk women ≥ 35, 1995-2003, Hospital of the University of Pennsylvania

• 38+5 to 39+6 weeks:
  – Lowest risks of NICU admission, CS, 3rd/4th deg tearing, low 5 min Apgar

• Other risk factors for CS / NICU admission not controlled for
Induction of Labour

RCOG, 2013

• Induction of Labour at Term in Older Mothers (Scientific Impact Paper No. 34)

• UK data, 2009-2010: if all women aged ≥ 40 were induced at 39 weeks instead of 41 weeks, 17 stillbirths could be prevented
  – Inducing 550 women to prevent one stillbirth
  – Induction at 40 weeks would prevent 7 stillbirths
Induction of Labour

Roos et al, 2010

• 1.1 million births, 1992-2002, Swedish Medical Birth Register

• ≥ 35 yo more likely to:
  – Experience postdates pregnancy ≥ 42 weeks (10.4% compared to 7.8% in women 20-24)
  – Failed induction (2x relative risk)
Induction of Labour

Ontario’s Better Outcomes and Registry Network (BORN):

• Increasing maternal age significantly associated with a rise in CS rate (p < 0.0001)

• Positive association between induction of labour and CS, with rates of CS 15% to 20% higher in primiparas
Induction of Labour

![Graph showing induction rates and maternal age]

- Spontaneous labour
- Induced labour

Maternal age:
- 21-34
- 35-39
- ≥ 40

CS rate, %
Elective Caesarean

- Not much data
- ACOG: short-term benefits from elective CS may lessen for women who are older or overweight
  - Benefits such as lower risk of hemorrhage, surgical complications, urinary incontinence may decrease with AMA and ↑BMI
Induction of Labour

ACOG: no official recommendations for AMA ≥ 35 yo

RCOG (2013): *Induction of labour at term in older mothers*

“Risk of stillbirth at 39-40 weeks for all ages is 1/1000... Risk of stillbirth at 39-40 weeks for age ≥ 40 is 2/1000... Women ≥ 40 have a similar stillbirth risk at 39 weeks to women in their mid-20s at 41 weeks, and the consensus is that IOL should be offered to prevent late stillbirth.”

SOGC (2013): *Induction of labour*

“Given the increased risk of stillbirth in women with advanced maternal age some experts suggest that women ≥ 40 years of age be considered biologically post-term at 39 weeks’ gestation and that delivery be considered at this gestation.”