Have induction rates for decreased fetal movements changed since a change in guideline?



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Decreased fetal movements

- Insufficient data from randomised control trials to develops guidelines (Hofmeyr & Novikova, 2012), likely largely due to ethical considerations
- Associated with neurodevelopmental delay, infection, feto-maternal haemorrhage, umbilical cord complications, fetal growth restriction, placental insufficiency, and emergency delivery (RANZCOG, 2016)
- Women who seek care for decreased fetal movements are more likely to be offered and undergo induction of labour (Akselsson et al, 2019)
- 70% of women who present with a single episode of decreased fetal movements have an uncomplicated pregnancy (RCOG, 2011)

Background - Version 4 of the South Australian Perinatal Practice Guideline for decreased fetal movements (DFM) was accepted to replace version 3 on the 10th of July 2018. It is modelled on the Clinical Practice Guideline for the Care of Women with Decreased Fetal Movements published by the Perinatal Society of Australia and New Zealand in 2017.

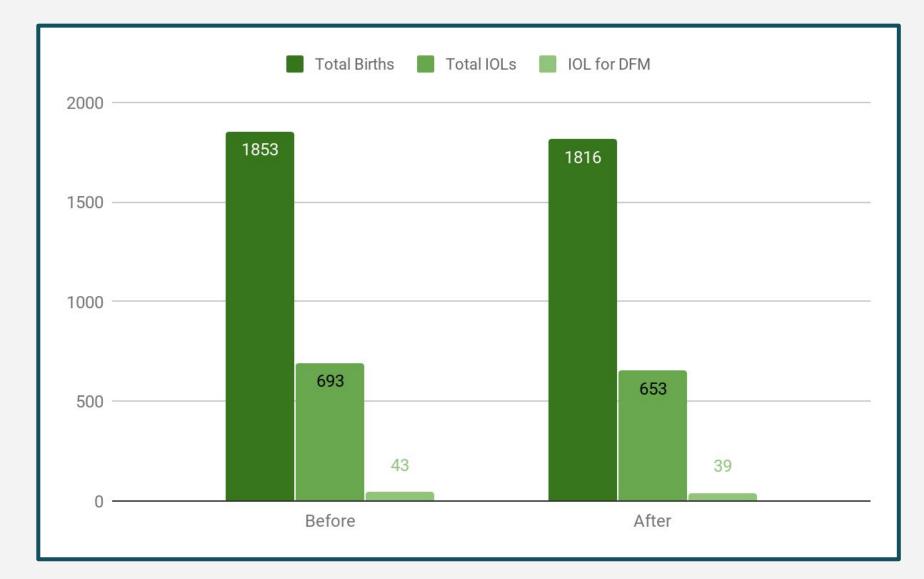
Aim - To determine whether the update had influenced induction rates for this indication.

Methods - Perinatal statistics for women birthing at a major tertiary hospital in South Australia were reviewed for a 6-month period before the update in guideline (January 2018-July 2018) as well as a 6-month period after (July 2018-January 2019). The differences in rates of induction for DFM were retrospectively analysed using a two-tailed test with alpha value 0.05.

Results - During the 6-months prior to the update, a total number of 1853 women birthed with 693 inductions of labour. Of the inductions, DFM was listed as an indication in 43 cases, or 6.2%. During the 6-month period after the update, a total number of 1816 women birthed. 653 of these women were induced with DFM as an indication in 39 cases, or 5.97%. This reduction in rate of 3.75% is not statistically significant (p-value 0.57).

Discussion - The relevant guideline applies to patients presenting with DFM from 28 weeks' gestation and the decision to proceed to induction of labour is based on clinical correlation and the discretion of senior obstetric practitioners. There is scope to analyse outcomes such as stillbirth and maternal wellbeing with regards to this change in guideline.

The revised SA Health PPG for decreased fetal movements change has not significantly affected rates of induction of labour for this indication



6 months before rate of IOL	0.06205 (0.04491 to 0.08358 95% CI)
6 months after rate of IOL	0.05972 (0.04247 to 0.08165 95% CI)
Incidence rate difference	0.002325 (P=0.86)
Incidence rate ratio	1.0389 (0.6577 to 1.6456 95% CI)
Change in rate	0.0375 (P=0.57)

References

- Akselsson A, Lindgren H, Georgsson S, Petterson K, Radestad I. Increased labor induction and women presenting with decreased or altered fetal movements - a population-based survey. 2019;14(5): e0216216.
- 2. Department for Health and Ageing, Government of South Australia.

 Decreased Fetal Movements South Australian Perinatal Practice
 Guideline. 2018.
- 3. Gardener G, Daly L, Bowring V, Burton G, Chadha Y, Ellwood D, Frøen F, Gordon A, Heazell A, McDonald S, Mahomed K, Norman JE, Oats J, Flenady V. Clinical practice guideline for the care of women with decreased fetal movements. Centre of Research Excellence in Stillbirth. Brisbane, Australia, August 2017.
- 4. Hofmeyr GJ, Novikova N. Management of reported decreased fetal movements for improving pregnancy outcomes. *Cochrane Database Syst Rev.* 2012;4(4):CD009148.
- Royal College of Obstetricians and Gynaecologists. Reduced Fetal Movements Green-top Guideline No. 57. 2011.