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A series for mothers and healthcare professionals Knowledge

At-risk conditions that impact breastfeeding

Secretory activation (milk 'coming in')

Normally occurs between 24-72 hours after delivery. It initiates (starts) the increase of larger volumes of milk. $^{1}\,$

Delayed secretory activation

Defined as little or no maternal perception of breast fullness or leaking \geq 72 hours post-birth.¹

Complications of delayed secretory activation

Women experiencing delayed secretory activation have 60% higher odds of stopping breastfeeding at 4 weeks.² Over 40% of mothers are at risk of delayed secretory activation.³



There are some conditions or circumstances that put mothers at risk of delayed secretory activation These risk factors should be screened for pre and postnatally as they can negatively impact breastfeeding and milk production

Many of these risk factors can be assessed before birth:

- Maternal obesity⁴⁻⁶
- Diabetes^{1, 7}
- Breast reduction surgery⁸
- Primiparity- First time mothers^{1, 7, 9}
- Planned caesarean section¹⁰
- Induction of labour (IOL) Compared to women who have spontaneous labour, those who have an IOL are more likely to have caesarean sections, epidurals, episiotomies and postpartum haemorrhage (PPH).^{9, 11}

Some risk factors may be noted during or after birth:

- Unplanned/emergency caesarean section¹⁰
- Stressful or prolonged labour and birth^{3, 12-14}
- Psychosocial stress / pain¹
- Postpartum haemorrhage (PPH)^{1, 15}
- Preterm or late preterm infant^{1, 16}
- Mother-infant separation¹⁷
- Delayed first breastfeeding episode¹⁸
- Formula supplementation within the first 48 hours^{1,9}
- Breastfeeding (or pumping) < 8 times in 24 hours^{1, 18-21}
- Additional risk factors: infant feeding issues and overuse of pacifers.^{1,9}

First time mothers are at 30-40% increased risk of a delayed secretory activation. Maternal primiparity, combined with any of the other risk factors, puts these women at a much higher risk of inadequate milk volumes.¹

Taking timely steps to minimise the impact of these conditions on future lactation is essential

Standardised 'at-risk mother' lactation protocol which includes: Identification of at-risk women during pregnancy, best practice of effective early lactation support for identified women with risk factors.

Educate pregnant women and families about.^{9, 22, 23} The different stages of lactation, the milk production process, risk factors associated with delayed secretory activation, the best practice to ensure adequate milk volumes.

Prenatal lactation assessment should be offered to all women:^{1, 23} Any risk factors should be documented and communicated in the maternity record, education should be given to the pregnant woman and her situation discussed.

 For some mothers, when at-risk conditions are present, maximising breast stimulation and complete breast emptying through the use of pumping and hand expression, in addition to breastfeeding, may be necessary to enable them to achieve adequate breast milk volumes.¹

• Taking a "wait and see" approach may result in earlier breastfeeding problems.



Educate hospital staff about:^{21, 24}

The different stages of lactation, the milk production process, risk factors associated with delayed secretory activation, the best practice to ensure adequate milk volumes, as part of the 'atrisk mother' lactation protocol.

Initiation of lactation:^{1, 18, 21, 25}

Promote early, frequent and optimal breast stimulation, avoid initiation delays, use hospital-grade pumps that mimic the infant (these have been shown to help at-risk mothers achieve adequate milk volumes when delayed secretory activation occurs).

 Women who experience delayed secretory activation may be less able to sustain any and exclusive breastfeeding at four weeks.²

 At-risk conditions and delayed secretory activation should be used as clinical markers to identify women who have a higher chance of breastfeeding difficulties and earlier breastfeeding cessation.²

Find out more about protecting milk supply with mothers who have at-risk conditions at medela.com/atrisk

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