

5 INTRAPARTUM CARE

5.9 SECOND STAGE OF LABOUR

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5.9.1 Management of the second stage of labour
Section B
Clinical Guidelines
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5.9.1 MANAGEMENT OF THE SECOND STAGE OF LABOUR

BACKGROUND INFORMATION

Traditionally and currently the definition of second stage labour commencement is described as when the cervix is fully dilated. The duration of second stage is therefore based on when the woman is diagnosed as being fully dilated by the midwifery or medical staff.¹

The second stage of labour can be described as the:

- Latent, Passive or Descent phase

and the

- Active or Pelvic Floor phase

Latent / Passive / Descent Phase

This phase in second stage of labour is defined when the cervix is found to be fully dilated prior to, or in the absence of involuntary expulsive contractions². During this phase the fetal head progressively descends through the maternal pelvis, and internal rotation and flexion occurs.³

Active/Pelvic Floor Phase

The onset of the active phase of second stage labour is recognised when:

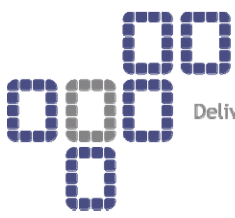
- the baby's presenting part is visible
- there are expulsive contractions with a finding of full dilatation of the cervix or other signs indicating full dilatation
- there is active maternal effort following confirmation of full dilatation of the cervix in the absence of expulsive contractions².

KEY POINTS

- Duration of second stage should be dictated by clinical judgement which includes analgesia use, maternal and fetal condition, and progress of presenting part through the pelvis.
- The second stage with active pushing is a time of increased fetal compromise.¹⁷
- The probability of a normal spontaneous birth decreases significantly for nulliparous women with or without an epidural if the head is not distending the perineum after one hour of active pushing.¹⁸
- The probability of a normal spontaneous birth decreases significantly for multiparous women after 50 minutes of active pushing if birth is not imminent.¹⁸
- The probability of a normal spontaneous birth decreases significantly for nulliparous women with an epidural if the duration of second stage is more than 3 hours.⁴

- The mother should be allowed to find her own technique and pattern of pushing. Directed pushing should be reserved for situations such as ineffective pushing techniques or fetal compromise.
- The maternal upright position in second stage provides benefits of a shorter second stage, reduction in assisted births, fewer episiotomies, less abnormal fetal heart rate patterns and reduced severe pain, but may be associated with increased blood loss.¹
- Epidural analgesia should continue to be part of the management in second stage, unless declined by maternal request.

PROCEDURE	ADDITIONAL INFORMATION
<p>1 Confirming second stage of labour</p> <p>Perform a vaginal examination to confirm second stage:</p> <ul style="list-style-type: none"> • When there is a delay in the first stage of labour⁵ • Evidence of caput succedaneum at previous vaginal examinations⁵ • If the woman has an urge to push and there is no head on view. • Prior to administering an epidural top-up⁵ 	<p>The second stage of labour does not need to be confirmed by vaginal examination if good progress of the presenting part is made, the contractions are regular and strong, she does not have an epidural, and the presenting part is visible at the introitus.⁵</p> <p>The urge to push is related to the level of the fetal head. A significant number of women (nulliparous and multiparous) have an urge to push before full dilation. Premature pushing before full dilation can lead to maternal exhaustion and / or oedema of the cervix</p>
<p>2 Observations during second stage</p> <p>2.1 Maternal observations</p> <ul style="list-style-type: none"> • Blood pressure – 1 hourly • Pulse – 30 minutely • Temperature – 2 hourly • Urine output – frequent monitoring for signs of urinary retention • Amniotic fluid – frequent monitoring of colour and odour • Contractions – 30 minutely • Palpation – prior to vaginal examination or to assess progress • Vaginal examinations – 1 hourly in the active phase or at woman's request.² 	<p>Frequency of maternal observations may need to be increased if the medical or physical condition requires closer monitoring.</p> <p>A full bladder will delay descent of the fetus, and pressure may result in bladder damage.⁶</p>



2.2 **Fetal observations**

Auscultation the fetal heart rate⁷:

- 5 minutely

during the active phase of pushing assess FHR towards the end of a contraction and for at least 30 seconds after the contraction.

Continuous fetal monitoring should be used if the active second stage > 1 hour and birth is not imminent.

See Clinical Guidelines Section [B 5.6 Intrapartum Fetal Heart rate Monitoring for indications for continuous cardiotocograph monitoring \(CTG\)](#)

The maternal pulse should be monitored if there is suspected fetal bradycardia or any other FHR anomaly to differentiate the two rates.²

3 **Duration of second stage**

Time limitations for duration of second stage should be determined by clinical assessment of the:

- Progression and descent of the presenting part
- Maternal wellbeing
- Fetal well being

Prolonged phase of active pushing is associated with maternal neurological injury to the perineal structures.¹

Active pushing is associated with decreased utero placental perfusion and the pH drops more rapidly than in the first stage once active pushing commences.¹⁸

3.1 Without an epidural

- **Nulliparous** women – 1 hour from the start of the *active* phase.²
- **Parous** women – 1 hour from the start of *active* phase

Reassess the woman who has *no urge to push* 1 hour after diagnosis of fully dilatation. Advise the medical team of findings.²

If a nulliparous woman has been pushing for 1 hour and there is no head on view, notify the midwifery coordinator and registrar on Labour and Birth Suite.

If a multiparous woman has been pushing for 1 hour and birth is not imminent notify the midwifery coordinator and registrar on Labour and Birth Suite.

95% of nulliparous women would be expected to give birth within 1 hour from the start of the active stage.² If a nulliparous woman has not given birth after one hour of active pushing, but there is head on view and progressive descent is occurring, with no fetal distress, continue with active pushing.

95% of parous women are normally expected to give birth within 30 minutes of the start of the active phase.² If there is head on view after 30 minutes with progressive descent, and no fetal distress, continue with active pushing

3.2 With an epidural

Allow normal second stage of labour to continue for:

Nulliparous women – allow 1-2 hours for descent if there is no urge to push

Active pushing – allow 1 hour. Continue if birth is imminent

Parous women – allow 1-2 hours for descent if there is no urge to push.

Active pushing – allow 1 hour. Continue if birth is imminent.

Current evidence supports allowing time for fetal descent prior to pushing with epidural analgesia.^{10, 11}

The benefit of a policy of delayed pushing with epidural analgesia is a reduction in instrumental deliveries and second stage caesareans, but it also leads to an overall increase in duration of second stage labour. While it has been shown that it does not increase the risk for postpartum haemorrhage, a prolonged active phase in second stage can increase the risk for pelvic floor trauma.¹²

No evidence of adverse outcomes has been shown with infant Apgar scores, resuscitation, umbilical artery pH scores, trauma or perinatal death when women have delayed pushing with epidural analgesia.¹²

PROCEDURE	ADDITIONAL INFORMATION
<p>4 Maternal positioning</p> <ul style="list-style-type: none"> • Support the woman to adopt a comfortable position.¹³ • Discourage the women from lying supine or semi-supine.² • Advise the woman without an epidural of the benefits of the upright position¹³ <ul style="list-style-type: none"> • Encourage postural changes 	<p>The lateral position has been found to be beneficial during the decent phase, reducing instrumental deliveries in nulliparous women with epidurals.⁶</p> <p>Pushing is more effective in women without epidurals in the upright position, is associated with shorter second stages, fewer episiotomies and assisted births. It also decreases vena cava compression.⁵</p> <p>Insufficient evidence is available to assess the benefit of the upright position if women have an epidural in situ.¹⁴</p> <p>Postural changes may be a beneficial intervention to rectify asynclitism or malposition of the fetus. It may also prevent neurological injuries caused from exaggerated flexion of the legs and sustained bearing down by women.¹⁵</p>
<p>5 Pushing techniques in second stage</p> <p>5.1 Encourage spontaneous or involuntary pushing</p> <p>5.2 Reserve directed coached pushing for woman who have:</p> <ul style="list-style-type: none"> • difficulty pushing effectively¹ • a prolonged second stage • a non reassuring fetal heart rate¹⁶ 	<p>Prevents fetal hypoxic effects, urinary and perineal trauma, without having adverse effects on maternal, fetal or neonatal outcomes.¹⁵</p> <p>Coached pushing in second stage has a negative impact on the first void function and bladder capacity. It also causes increased detrusor overactivity and impairs pelvic floor function .¹⁶</p>
<p>6 Support and comfort measures</p> <ul style="list-style-type: none"> • Offer fluids and ice chips⁶ • Offer a wet flannel⁶ • Supply lip balm or moisturiser⁶ • Provide aids to assist with pushing e.g. birth stools, pillow, birth balls, mirrors 	<p>Due to maternal exertion in second stage the woman may experience perspiring and feel dehydrated.⁶</p>

PROCEDURE	ADDITIONAL INFORMATION
<p>7 Analgesia</p> <p>See Clinical Guidelines Section B 4 Pain Management in Labour</p> <p>Continue epidural top-ups as required in second stage of labour.</p>	<p>Sudden return of severe pain may cause distress to the women⁴</p> <p>Low dose analgesia epidural administration results in increased spontaneous deliveries with a reduction in assisted deliveries when compared to tradition epidural analgesia use.³</p>
<p>8 Birth</p> <p>See Clinical Guideline Section B 5.9.4.1 Birth Management</p>	
<p>9 Documentation</p> <p>Document observations on the MR270 Partogram</p> <p>Document all interventions or changes to the maternal/fetal condition on the MR250 Integrated Progress Notes.</p>	<p>Documentation should be done concurrent with care, or as soon as possible after an event</p>

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