

## 5 INTRAPARTUM CARE

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5.7 Management of Suspected Acute Fetal Compromise  
Section B  
Clinical Guidelines  
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### 5.7 MANAGEMENT OF SUSPECTED ACUTE FETAL COMPROMISE

#### AIM

The application of specific measures with the aim of increasing oxygen delivery to the placenta and umbilical blood flow in order to reverse hypoxia and acidosis.

#### KEY POINTS<sup>1</sup>

1. Fetal compromise in labour may be due to a variety of pathologies including placental insufficiency, uterine hyperstimulation, maternal hypotension, cord compression and placental abruption. Identification and management of reversible abnormalities may prevent unnecessary intervention.
2. Continuous electronic cardiotocograph (CTG) monitoring should be employed when fetal compromise is detected at the onset of labour or develops during labour.
3. A normal CTG is associated with a low probability of fetal compromise and has the following features
  - Baseline rate 110-160.
  - Baseline variability 5-25bpm.
  - Two accelerations of 15bpm for 15 seconds during a 20 minute period
  - No decelerations.
4. The following features **are unlikely** to be associated with significant fetal compromise when occurring in isolation.
  - Baseline rate 100-109
  - Absence of accelerations.
  - Early decelerations
  - Variable decelerations without complicating features
5. The following features **may be** associated with significant fetal compromise and require further action
  - Fetal tachycardia
  - Reduced baseline variability
  - Complicated variable decelerations
  - Late decelerations
  - Prolonged decelerations
6. The following features **are very likely** to be associated with significant fetal compromise and require immediate management, which may include urgent birth
  - Prolonged bradycardia( < 100bpm for > 5 minutes).
  - Absent baseline variability
  - Sinusoidal pattern.

- Complicated variable decelerations with reduced baseline variability.
  - Late decelerations with reduced variability.
7. There is no research evidence evaluating the benefits or risks associated with the short term use of maternal facial oxygen therapy in cases of suspected fetal compromise.<sup>2</sup>

## MANAGEMENT

1. Reposition the woman into the left lateral position
2. If an oxytocic infusion is in progress, stop the infusion.
3. If a plain intravenous infusion is present, increase the rate of administration.
4. Continue with or commence continuous fetal heart rate monitoring.
5. Check and document maternal observations.
6. Perform a vaginal examination. Consider applying a fetal scalp electrode.
7. Notify the Labour and Birth Suite coordinator and obstetric registrar or above immediately if:
  - The CTG confirms the abnormality
  - The abnormality is persistent.
  - The fetal heart becomes difficult to find.
  - The CTG trace is difficult to interpret.
8. If there is persistent fetal bradycardia (<100bpm > 5 minutes) call for assistance immediately by pressing the 'assist' button. **Do not leave the room.**
9. Prepare for possible fetal scalp pH sampling  
or  
Prepare for assisted vaginal or caesarean birth if indicated.
10. If there is evidence of severe ongoing fetal compromise and immediate birth is not possible, tocolysis may be considered. A suggested regime is subcutaneous terbutaline 0.25mg.

## REFERENCES

1. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. 2006. Intrapartum Fetal Surveillance Clinical Guidelines. **Clinical Guidelines**. 2<sup>nd</sup> ed. Melbourne.
2. Fawole B, Hofmeyr GJ. Maternal oxygen administration for fetal distress. **Cochrane Database of Systematic Reviews**. 2007. Issue 2. Art. No.: CD000136.