Use of oxytocin after spontaneous onset of labor in France

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New guidelines by the French National College of Midwives (CNSF), in collaboration with the French National College of Gynecologists and Obstetricians (CNGOF)

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Introduction

- France had no clinical guideline for oxytocin usage during spontaneous labor
- **58% of French women** in spontaneous labor received oxytocin (2010).
- Oxytocin is probably overused due to obsolete definition of normal labor and misusage
- Oxytocin usage might have serious consequence for mothers and newborns

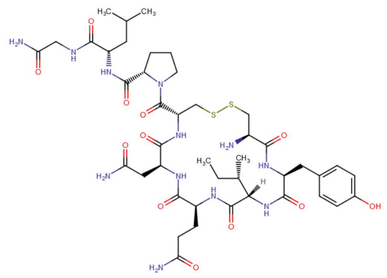
Objectives

- To define normal and abnormal labor
- To specify the indications, dosage, procedures and effects of oxytocin administration
- To describe the adverse maternal and perinatal effects associated with it

1. Normal and abnormal labor

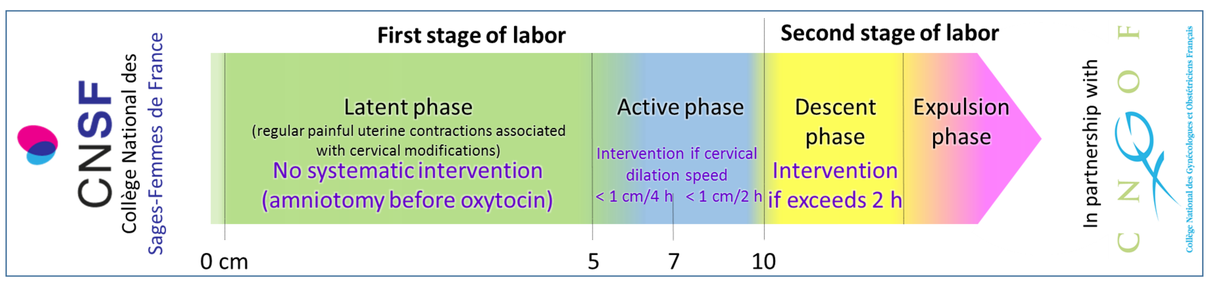
1st stage of labor (one latent and one active phases)

- No labor dystocia during the latent phase
- Active phase start at **5-6cm** of dilation
- Dilation speed should be considered abnormal if
  - slower than 1 cm/ 4 h before 7cm
  - slower than 1 cm / 2h after 7cm



2nd stage of labor (one descent and one expulsion phases)

- The maximum duration of the descent phase of the second stage of labor cannot be determined from the literature
- But the risk-benefit balance becomes less favorable after 3 hours



Reference: Dupont C et al. Oxytocin administration during spontaneous labor: Guidelines for clinical practice. Guidelines short text. J Gynecol Obstet Hum Reprod. 2017 May 2 (online).

2. Oxytocin administration

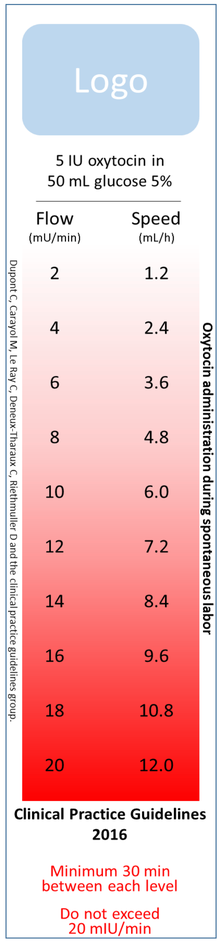
- Oxytocin should be administered **at ruptured membrane** in case of labor dystocia or in case of 2nd stage prolonged beyond 2 hours
- Oxytocin should be administered at the minimum effective dose
- Uterine response and fetal heart rate must be taken into account
- Amniotomy should be performed 1h before oxytocin administration
- No routine amniotomy or oxytocin **before 5cm** of dilation
- Epidural **is not a reason** for routine oxytocin administration
- Oxytocin administration should be considered as indicator for monitoring **quality of care** in delivery room

3. Procedure for administration

- Intravenous, using dose flow-rate control equipment
- Oxytocin should be administered at an **initial dose of 2mU/min**
- The oxytocin dose should be **increase by 2mU/min**, waiting at least **30min** between each increase, until cervical modification or 5 effective uterine contractions / 10min
- Dose should not exceed 20mU/min

4. Maternal and fetal adverse effects

- Oxytocin administration is associated with increased risk of uterine hyperactivity, post-partum hemorrhage, rupture of unscarred uterus, and neonatal acidosis
- We observed no evidence of causal relation with pain, women dissatisfaction with their birth experience, neonatal morbi-mortality (industrialized countries), hyponatremia, neonatal jaundice, or autism spectrum disorder.
- Oxytocin perfusion and the condition of its use should be analyzed during morbidity and mortality conferences



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