Use of oxytocin after spontaneous onset of labor in France

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▶ **To cite this version:**

Corinne Dupont, Didier Riethmuller, Catherine Deneux-Tharaux, Rémi Beranger, Anne A Chantry, et al.. Use of oxytocin after spontaneous onset of labor in France: New guidelines by the French National College of Midwives (CNSF), in collaboration with the French National College of Gynecologists and Obstetricians (CNGOF) . 31st International Confederation of Midwives (ICM) trienal congress, Jun 2017, Toronto, France. hal-01564458

HAL Id: hal-01564458

https://univ-rennes.hal.science/hal-01564458

Submitted on 18 Jul 2017

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Use of oxytocin after spontaneous onset of labor in France

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

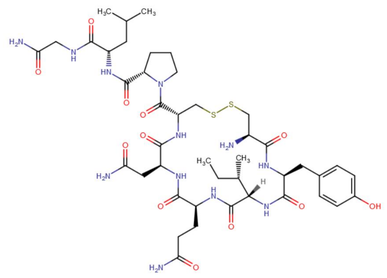
Objectives

- 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

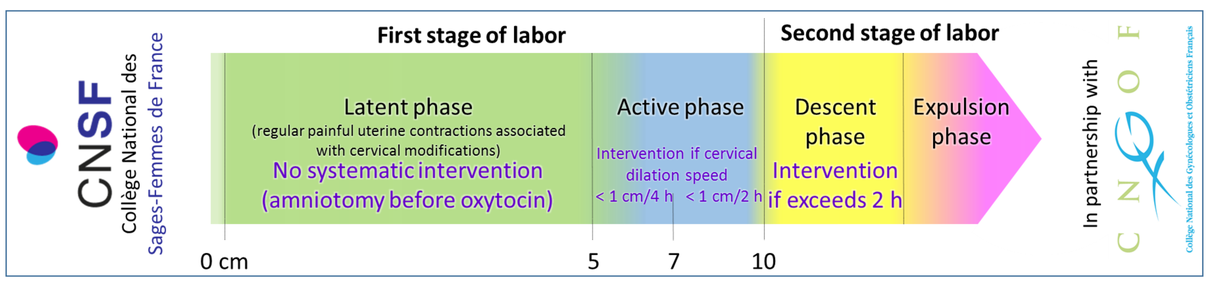
1st stage of labor (one latent and one active phases)

- 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

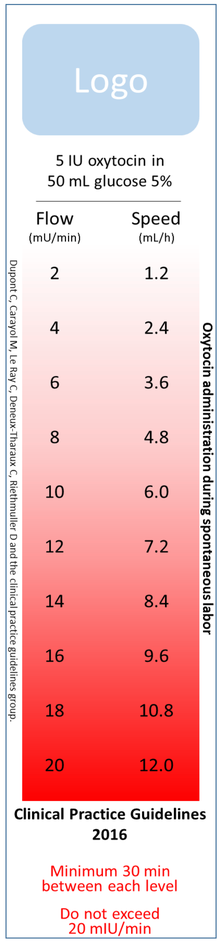
- Oxytocin should be administered **at ruptured membrane** in case of labor dystocia or in case of 2nd stage prolonged beyond 2 hours
- Oxytocin should be administered at the minimum effective dose
- Uterine response and fetal heart rate must be taken into account
- Amniotomy should be performed 1h before 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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