

Labor Induction

Johnna Oliver, Michelle Leal

Topic Background

Induction of Labor is a common obstetric intervention that stimulates the onset of labor using artificial measures. Rates of labor induction have nearly doubled since 1990 due to the lack of agreement on the clinical practice guidelines.

Indications

Induction of labor is indicated when it is thought that the outcomes for the baby and/or the mother are better than waiting for the spontaneous onset of labor. Some of the most common clinical scenarios include

- preeclampsia, gestational diabetes, preterm rupture of membranes, fetal growth restriction, oligohydramnios, gestational hypertension

Complications

Pharmacological Induction can cause uterine tachysystole leading to fetal decelerations or bradycardia.

Further complications include intrapartum vaginal bleeding, presence of meconium-stained amniotic fluid, umbilical cord prolapse, unrelieved pain, perineal lacerations, and postpartum hemorrhage.

Pharmacological Agents

- Oxytocin

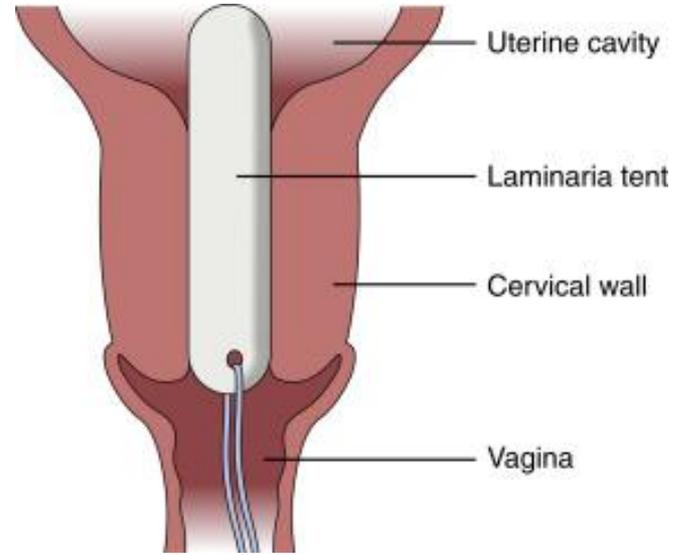
Side effects: uterine tachysystole, late decelerations, nausea/vomiting

- Prostaglandins

Side effects: fetal bradycardia, feeling of warmth in vaginal area

- Laminaria

Side effects: can become trapped or fragmented



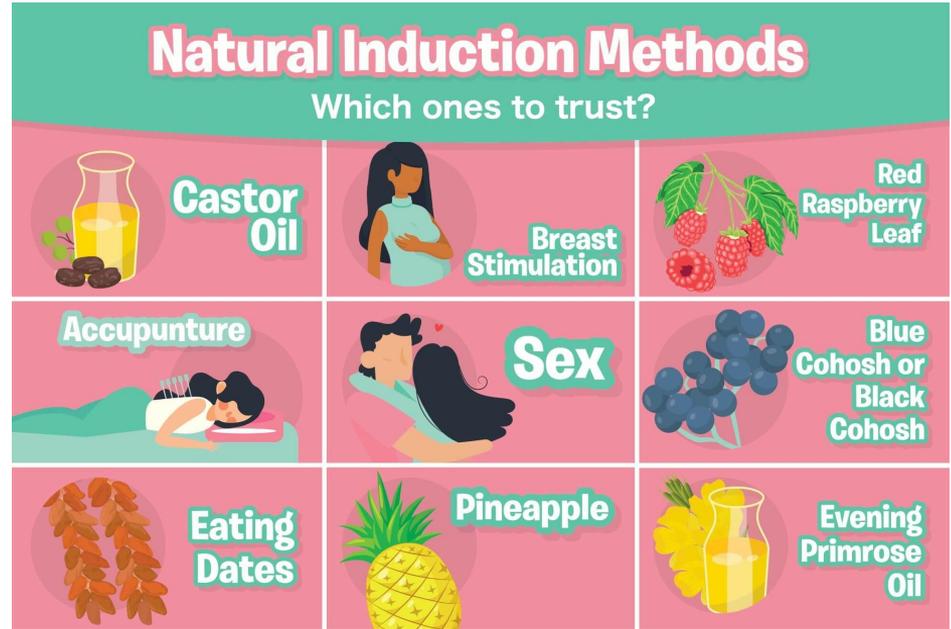
Mechanical Efforts to Induce Labor



A balloon is inserted into the cervix through a catheter and is expanded using saline or sterile water. The balloon slowly dilates the cervix and exerts pressure. These actions stimulate the natural release of prostaglandins.

Nonpharmacological approaches

- Birthing ball
- Herbal supplements
- Castor oil
- Hot baths
- Enemas
- Sexual Intercourse
- Breast stimulation
- Acupuncture/Acupressure



Nursing Responsibilities

The nurses within the interprofessional team play a very crucial role during the process of labor induction

- Fetal heart rate monitoring
- Medication administration
- Pain control
- Maternal observation
- Emotional support
- Documentation
- Notify provider of potential concerns



Patient Education

Need consent prior to
Induction

Pt needs to understand all
benefits, risks, and
alternatives

Labor support person needs
to be readily available



Community Impact

Women need to be provided the proper information and knowledge regarding induction of labor because the benefits should outweigh the risks.



References

De Vaan, M. D., Ten Eikelder, M. L., Jozwiak, M., Palmer, K. R., Davies-Tuck, M., Bloemenkamp, K. W., Mol, B. W. J., & Boulvain, M.

(2023, March 30). Mechanical methods for induction of labour. The Cochrane database of systematic reviews.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10061553/>

Dilation and Curettage. Dilation and Curettage - an overview | ScienceDirect Topics. (n.d.).

<https://www.sciencedirect.com/topics/medicine-and-dentistry/dilation-and-curettage>

Gill P, Lende MN, Van Hook JW. Induction of Labor. [Updated 2023 Feb 20]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls

Publishing; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK459264/>

Laminaria placement - wicha lab. (n.d.). <https://www.med.umich.edu/1libr/Gyn/BirthCenterTriage/LaminariaPlacement.pdf>

Martinez, L. (2022, November 21). Inducing labor: Medlineplus Medical Encyclopedia. MedlinePlus.

<https://medlineplus.gov/ency/patientinstructions/000625.htm>

Tenore J. L. (2003). Methods for cervical ripening and induction of labor. *American family physician*, 67(10), 2123–2128.

<https://pubmed.ncbi.nlm.nih.gov/12776961/>