

PARTURITION :-

- ⇒ MEANS BIRTH OF BABY
- ⇒ BASIC OUTLINE

UTERUS BECOMES MORE EXCITABLE → ↑ IN STRENGTH OF RHYTHMIC CONTRACTION

HORMONAL FACTORS

- ↑ IN ESTROGEN-PROGESTERONE RATIO
- RELEASE OF OXYTOCIN
- FETAL HORMONES

MECHANICAL CHANGES

- ONSET OF LABOR
- MECHANICS OF PARTURITION

HORMONAL FACTORS :-

1) ↑ IN ESTROGEN-PROGESTERONE RATIO :-

- Ⓟ ⇒ ⊖ uterine contractility
- ⓔ ⇒ ⊕ uterine contractility.

- Throughout pregnancy :- ⓔ↑, Ⓟ↑
- From 7th month onwards :- ⓔ↑, Ⓟ↓

↓
E:P ↑ ⇒ uterine contractility ↑



2) RELEASE OF OXYTOCIN

- At time of labor oxytocin release ↑
 - Uterine muscles feel its oxytocin receptors
- Stimulates uterine contraction.

3) FETAL HORMONES

- FETAL PITUITARY GLAND → Oxytocin
 - FETAL ADRENAL GLAND → Cortisol
 - FETAL MEMBRANES → Prostaglandins
- ↑ uterine contraction

MECHANICAL CHANGES:-

• ONSET OF LABOR

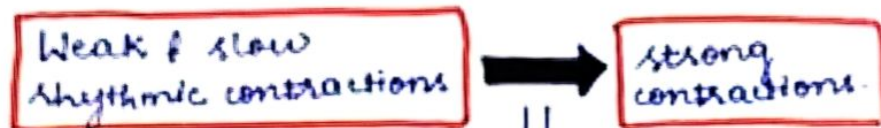
Most of pregnancy
↓
Weak & slow rhythmic contractions of uterus
↓
Braxton-Hicks contractions

End of pregnancy
↓
Becomes strong contractions

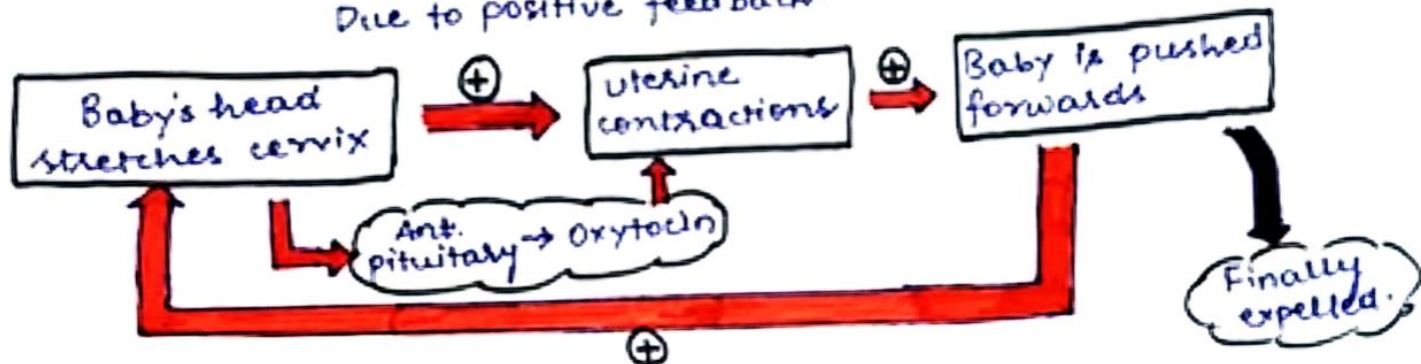
These processes that starts occurring from hours before parturition is k/a "Labor"

Hours before parturition
↓
Exceptionally strong contractions
↓
↑ stretching of cervix
↓
forces baby through birth canal
↓
Parturition

These strong contractions that result in final parturition is k/a "labor contractions"



Due to positive feedback.



Contractions of labor occur intermittently i.e. short period of relaxation between contractions.

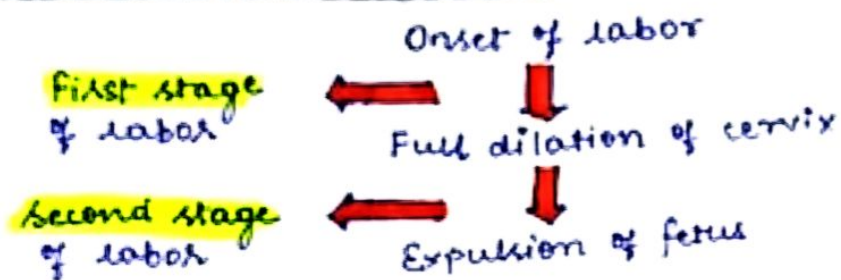
overuse of uterine stimulants such as oxytocin

If there is only continuous strong contraction

uterine spasm

stops blood flow through placenta → death of fetus.

● MECHANICS OF PARTURITION



First stage of labor:-

- Progressive cervical dilation
[8-24 hrs in first pregnancy
few mins if after many pregnancies]
- Cervix softens; so that it can be easily dilated.

Second stage of labor:-

- Fetal membrane ruptures
- Amniotic fluid lost through vagina
- Fetus moves rapidly through birth canal
- Expulsion of fetus.

Separation & delivery of placenta

for 10-45 mins.

After birth of baby

uterus continues to contract

↓
shearing effect between walls of uterus & placenta

↓
Placenta separates from implantation site

↓
opening of placental sinus → Bleeding (350ml)

After parturition

for 4-6 weeks

→ Involution of uterus

- ↓
- weight ↓
 - size ↓

→ Autolyzing (self destruction) of endometrial surface at placental site

↓
vaginal discharge → Lochia

• Finally endometrial surface is reepithelialized.