

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 :-

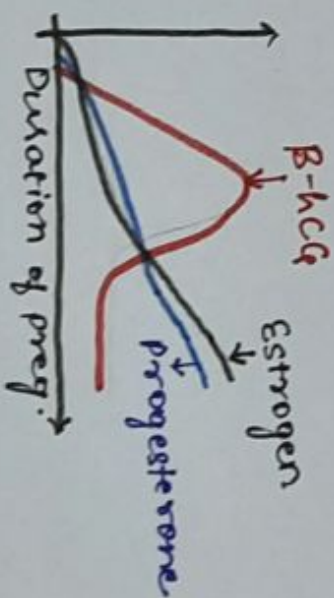
② → ⊖ uterine contractility

③ → ⊕ uterine contractility.

• Throughout pregnancy :- ③ ↑, ② ↓

• From 7th month onwards :- ③ ↑, ② ↓

③ ↑ → uterine contractility ↑



2) RELEASE OF OXYTOCIN

- At time of labor oxytocin release ↑
- Uterine muscles see it 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 strong contractions that result in final parturition is k/a labor contractions

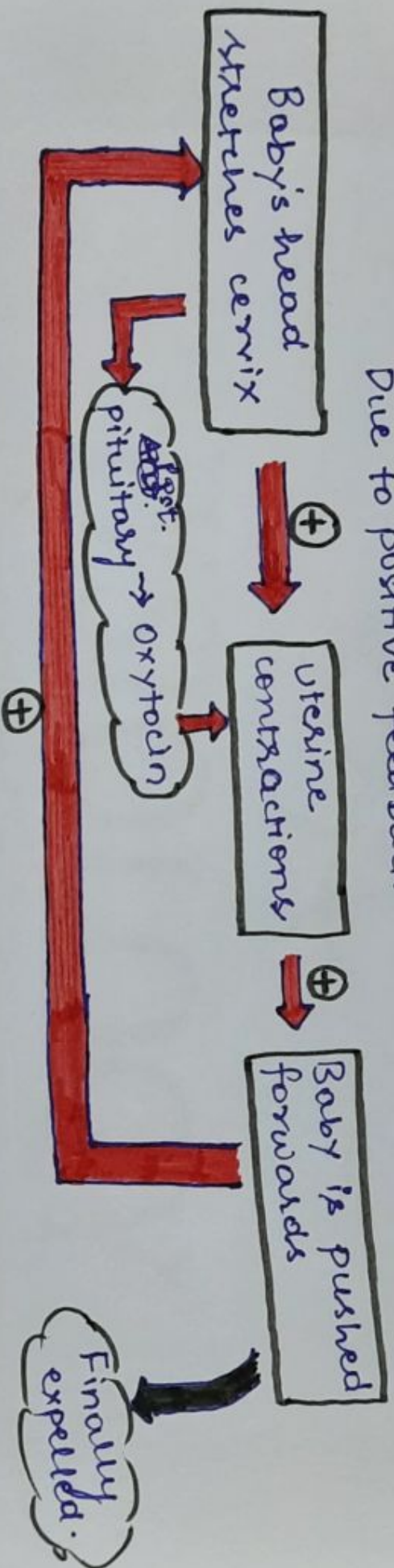
Hours before parturition
↓
Exceptionally strong contractions
→ ↑ stretching of cervix
→ forces baby through birth canal
↓
Parturition

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

Weak & slow rhythmic contractions

Strong contractions.

Due to positive feedback.



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

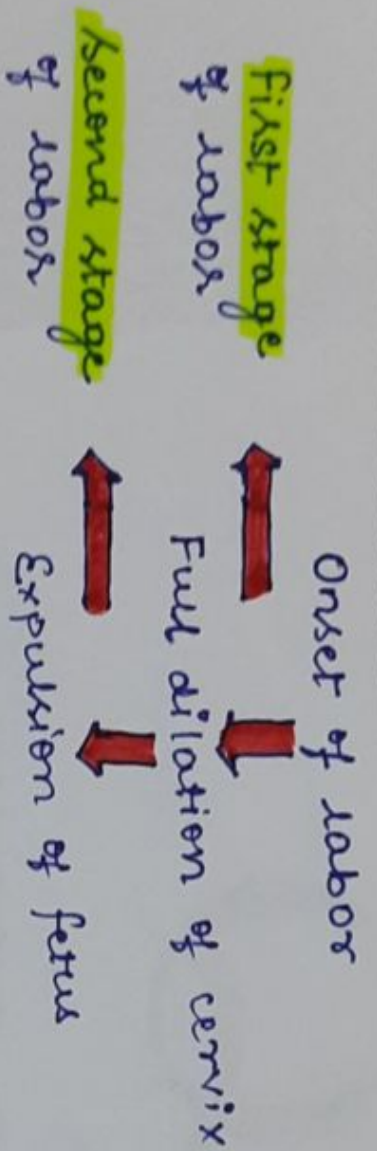
If there is only continuous strong contraction

uterine spasm

overuse of uterine stimulants such as oxytocin

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
minutes

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)

for 4-5
weeks

After parturition



Involution of uterus



- Weight ↓
- Size ↓



Autolyzing (self destruction) of endometrial surface at placental site



Vaginal discharge → Lochia

- Finally endometrial surface is reepithelialized.