

Embryogenesis is.....

- The formation & growth of an embryo

What does totipotent mean?

- have the ability to form all cell types of conceptus

What is multipotent?

- ability to form a limited range of cells & tissues appropriate to location

What is pluripotent?

- have the ability to form 3 germ layers

What are some things that form from the endoderm?

- digestive system, lungs, endocrine system

What can form from the mesoderm?

- muscle, skeleton, cardiovascular, reproductive system

What forms from the ectoderm?

- Nervous system, skin, hair

What are some key things that form in the ectoderm germ layer?

- hypothalamus & both lobes of pituitary

ENDODERM:

- primordial germ cells

What are some key things that form in the mesoderm germ layer?

- reproductive systems

What are the 2 lobes of the pituitary gland?

- Anterior / Posterior
(adenohypophysis) (neurohypophysis)

What forms the anterior pituitary lobe (adenohypophysis)?

- tissue in roof of embryo's mouth
- Rathke's pouch
- stomodeal ectoderm

What forms the posterior pituitary (neurohypophysis)?

- floor of brain
- diverticulum develops from floor + grows ventrally towards Rathke's Pouch

In the 1st trimester, lots of things happen, what are some of those "things"?

- Migration of primordial germ cells, formation evident sex structures
- Sex cord develops in gonads

In the 2nd trimester, what happens with the embryo?

- development of male testes/ducts OR
- female ducts/ovaries + formation of BL

What are the possible sex chromosomes an oocyte can have?

X only

What are the possible sex chromosomes a spermatozoa can have?

X & Y

What gene is on the Y chromosome that makes a male, male?

SRY

SRY stands for....

Sex determining Region on Y chromosome

If there is no SRY, what tract forms?

female

If the SRY gene is not present, what hormone is not expressed?

Anti-mullerian hormone

XX chromosomes mean....

female

XY chromosomes mean....

male

XX with SRY gene.....

Phenotypically male

XY with no SRY gene.....

Phenotypically female

What is the Klinefelter syndrome?

XXY

What is the Turner Syndrome?

X

What is Swyer syndrome?

XY w/ no SRY gene

What is XX male syndrome?

XX w/ SRY gene

If someone has Turner syndrome, they will be...

Short + stocky w/ underdeveloped tract

About how long is the yolk sac still present?

15% ~~15~~

Primitive sex cords cause the gonadal Ridge to enlarge and push towards the developing kidney

What is the non-function primitive form of kidney?

Pro nephros

What is the definition of the mesonephros?

functional intermediate Kidneys,
Produce urine

What is the mesonephric ducts also known as?

Wolffian ducts : Males are ~~Wolffian ducts~~
Wolffian ducts

What is also known as the paramesonephric ducts?

Mullarian ducts

What sex has the Mullarian Ducts?

female

What sex has the Wolffian Ducts?

male

The Wolffian Ducts are retained and form what tubular structures?

epididymis & vas deferens

The Mullarian Ducts are retained and form what tubular structures?

Oviducts, uterus, cervix, & cranial vagina