

Embryology

Gametogenesis

Mon, Feb 22

④ Primordial germ cells ^{Form} → mature gametes (ova, sperm)
 ④ male (sperm) → Female (ova) → the aim of Gametogenesis.

④ when production of sperm and ova we have 2 changes:
 1) **Nucleus**: reduced of number chromosome to (23) (haploid)
 2) **Cytoplasm**: increases in ova & reduced in sperm.

④ The sperm and ova formed inside the gonads (testis/ovary)

④ Ejaculatory duct → Prostatic Part of urethra
 ④ the cervix of uterus → Projection in Vagina
 ④ Vas deferens → Vas deferens (قناة المار بين)

④ Wall of the endodermal layer of yolk sac ^{Form} → Primordial germ cells.
 Yolk sac in 2nd week after fertilization ^{Form} → gut tube

④ in the end of 5th week they migrate to reach developing gonads

④ Testis in male
 باية ذكري
 يكون نابطن
 وبعده بين البنجر

④ Primordial germ cells migrate in the end of 5th week by amoeboid movement to toward to hind gut epithelium and then through dorsal mesentery to the primitive gonads in the abdomen. Then they invade the genital ridge of the primitive gonads in the 6th week of development.

④ They reach the primitive gonads by:

1) Primitive gonads give chemostatic attractant for the germ cell
 2) Tissue rearrangement

④ in male ^{prostate} → Seminal vesicles & tubules of testis ^{and} → Spermatozoa

④ in female ^{prostate} → oviduct & ovary ^{and} → oogenesis The end!

