

Gametogénesis

Control hormonal



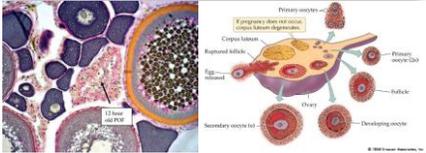
Folículos primordiales a terciarios

- Control intraovárico
- genético



Crecimiento folicular

- FSH
- Folículo ovárico



Células de la teca

- Andrógenos



Células del epitelio folicular

Estrógenos

Activina

Folículoestatina



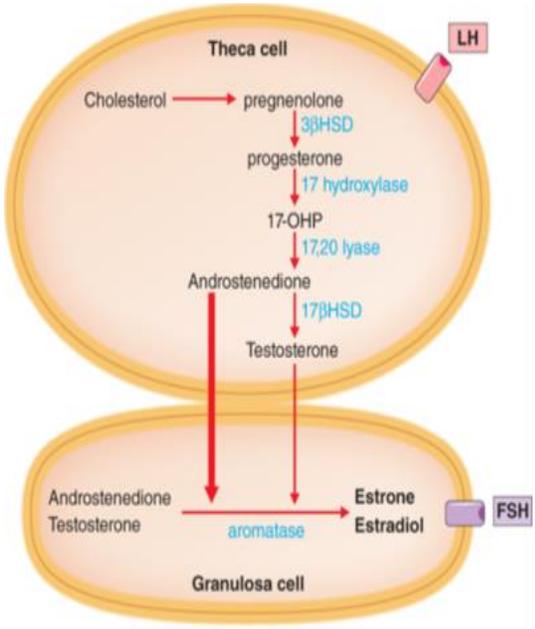
LH



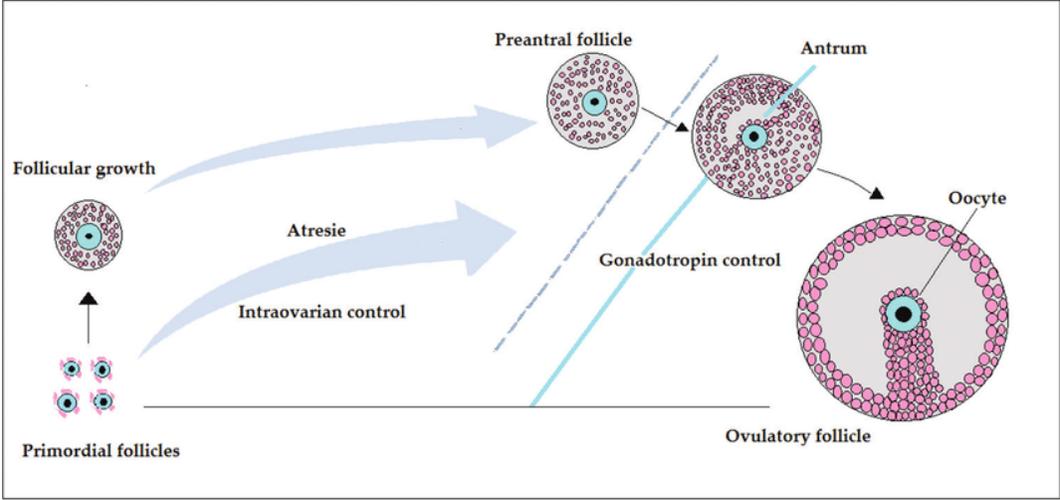
Conversión desde testosterona a **Progesterona**



OVULACIÓN

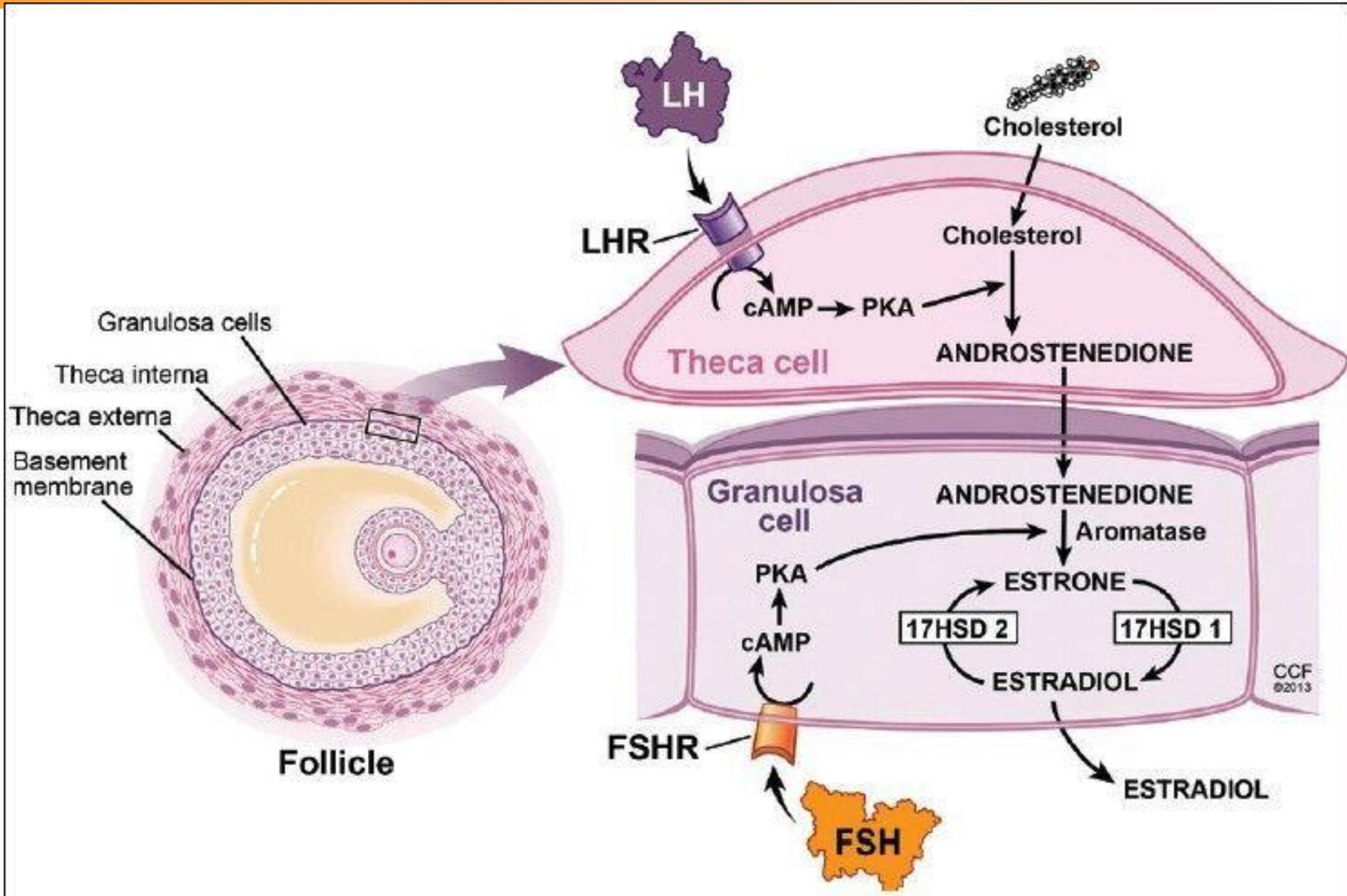


Source: J.L. Jameson, A.S. Fauci, D.L. Kasper, S.L. Hauser, D.L. Longo, J. Loscalzo: Harrison's Principles of Internal Medicine, 20th Edition Copyright © McGraw-Hill Education. All rights reserved.



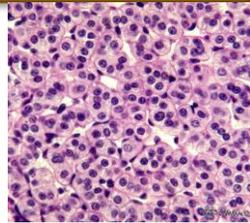
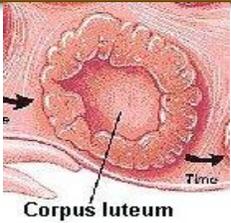
FASE FOLICULAR DEL CICLO OVÁRICO



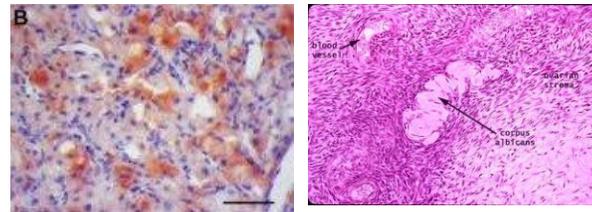


FASE LUTEAL DEL CICLO OVÁRICO

Cuerpo lúteo
Progesterona +
Estrógenos -
• LH



Luteólisis



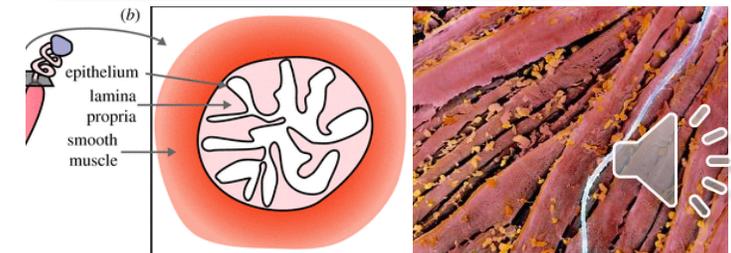
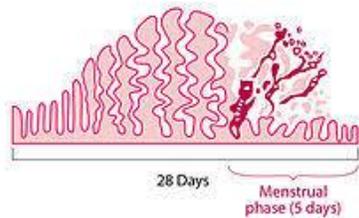
Progesterona -
Estrógenos +



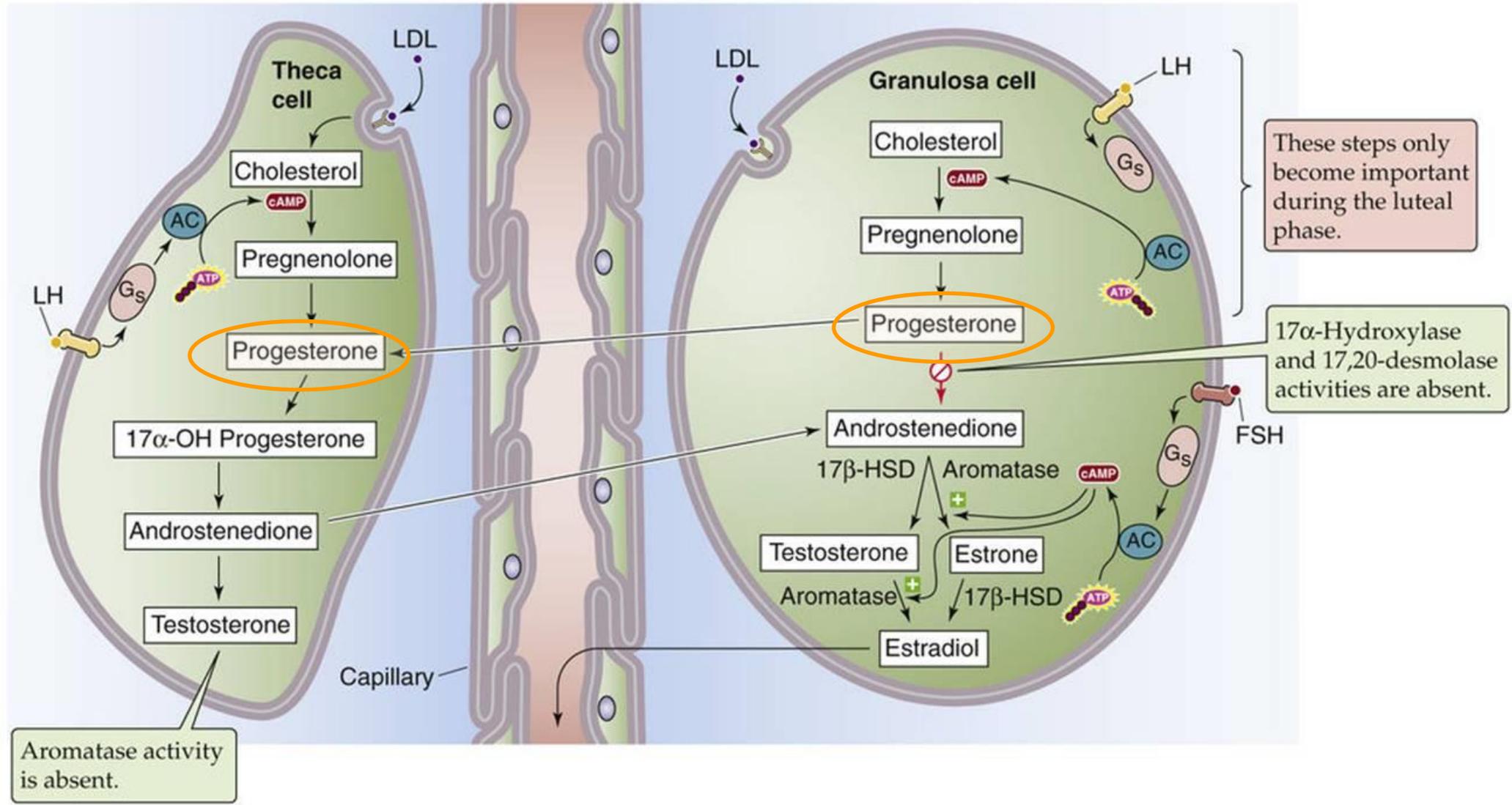
Oviposición/parto/
menstruación

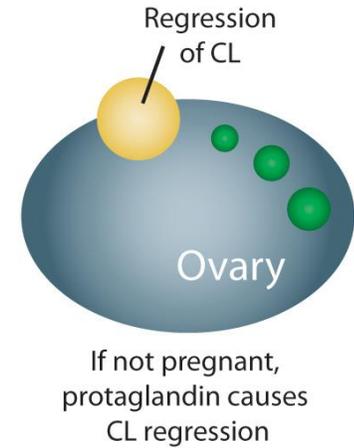
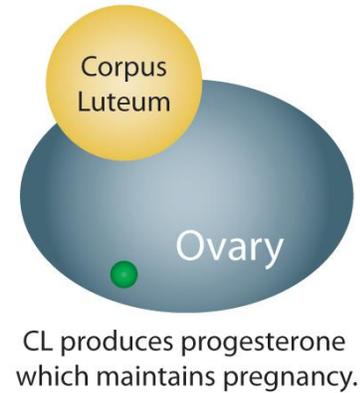
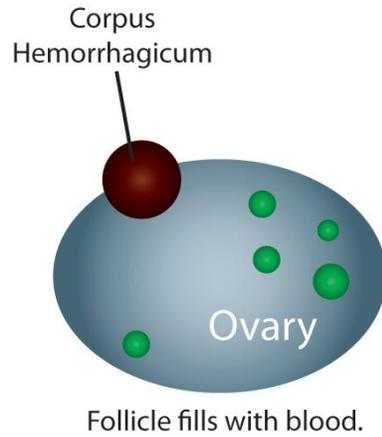
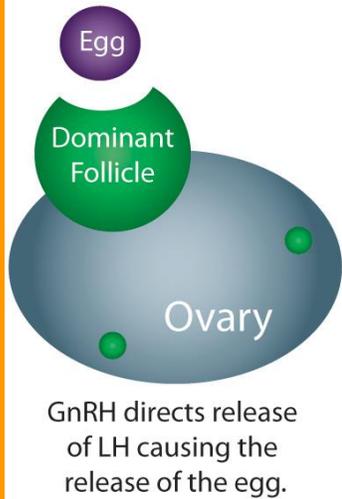
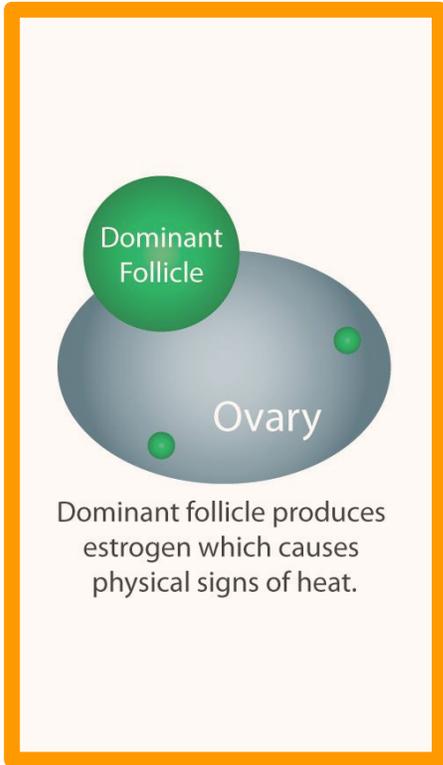
Liberación del
huevo/embrión

Contracción
músculo liso
oviductal



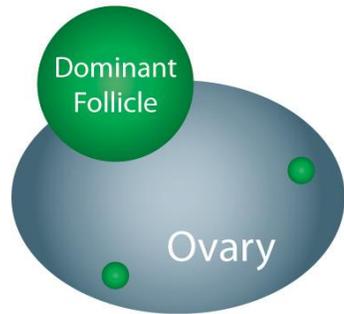
Control hormonal



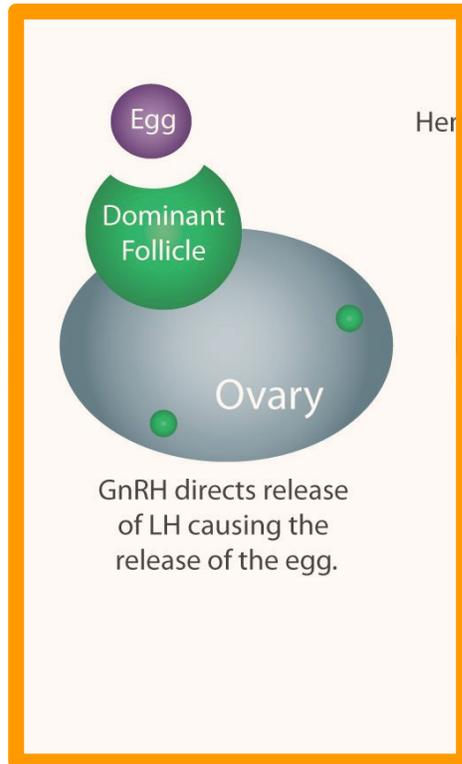


Fase folicular

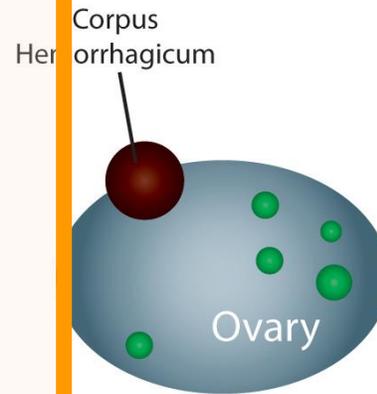




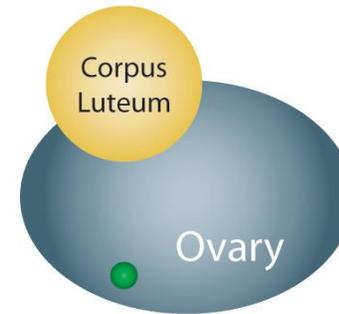
Dominant follicle produces estrogen which causes physical signs of heat.



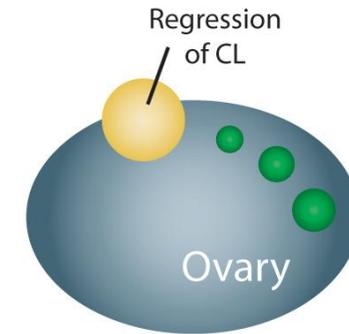
GnRH directs release of LH causing the release of the egg.



Follicle fills with blood.



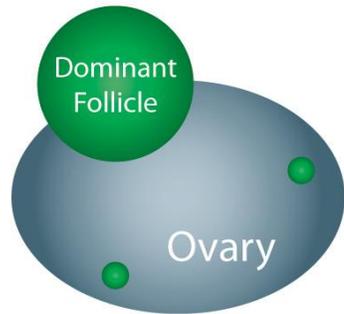
CL produces progesterone which maintains pregnancy.



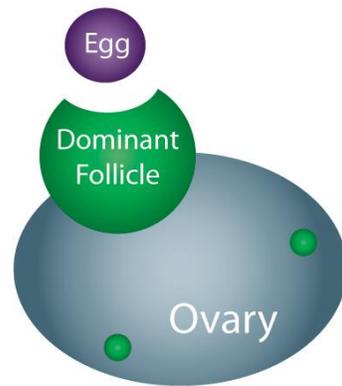
If not pregnant, prostaglandin causes CL regression

Ovulación

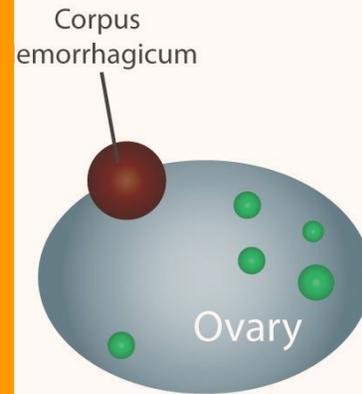




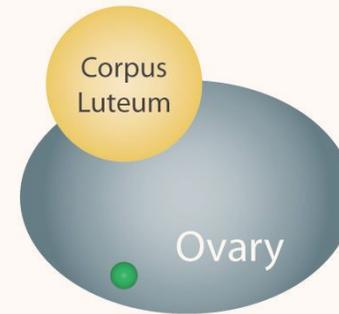
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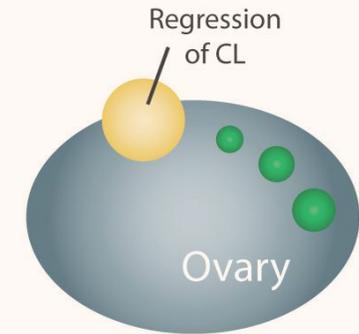
GnRH directs release of LH causing the release of the egg.



Follicle fills with blood.



CL produces progesterone which maintains pregnancy.



If not pregnant, prostaglandin causes CL regression

Fase luteal



Ciclo estral

- La hembra sólo acepta la cópula en el estro (ovulación)

Ciclo estral



- Puede haber varios estros
- Varias camadas por temporada reproductiva

Poliestrales



- Un solo estro por temporada reproductiva (carnívoros)

**Mono
estrales**



- La ovulación ocurre haya o no cópula

**Ovulación
espontánea**



- La ovulación ocurre inducida por la cópula (conexión neuro-hipot-hipof)

**Ovulación
inducida**



Ciclo estral

Proestro

- Fase folicular
- Desarrollo endometrial y del epitelio vaginal

Estro

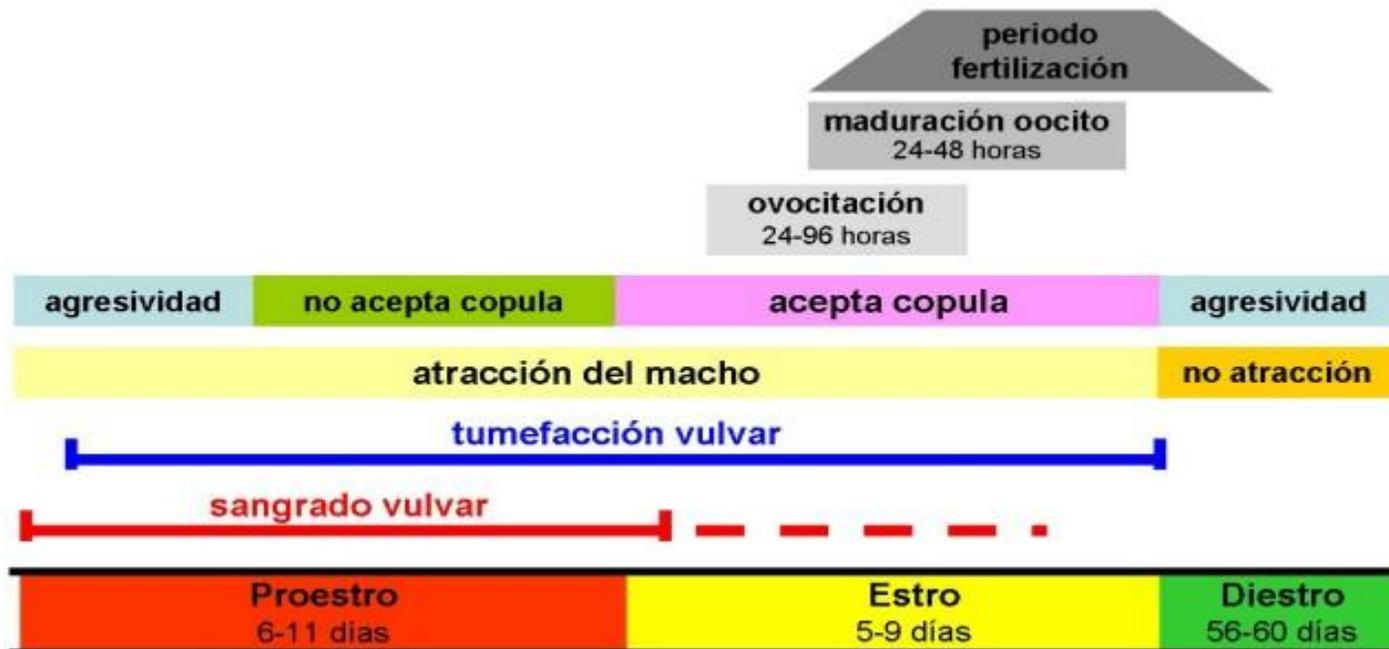
- Ovulación

Metaestro

- Luteogénesis
- Fase luteal

Diestro

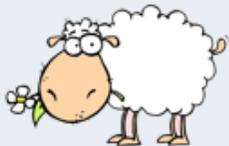
- Luteólisis completa



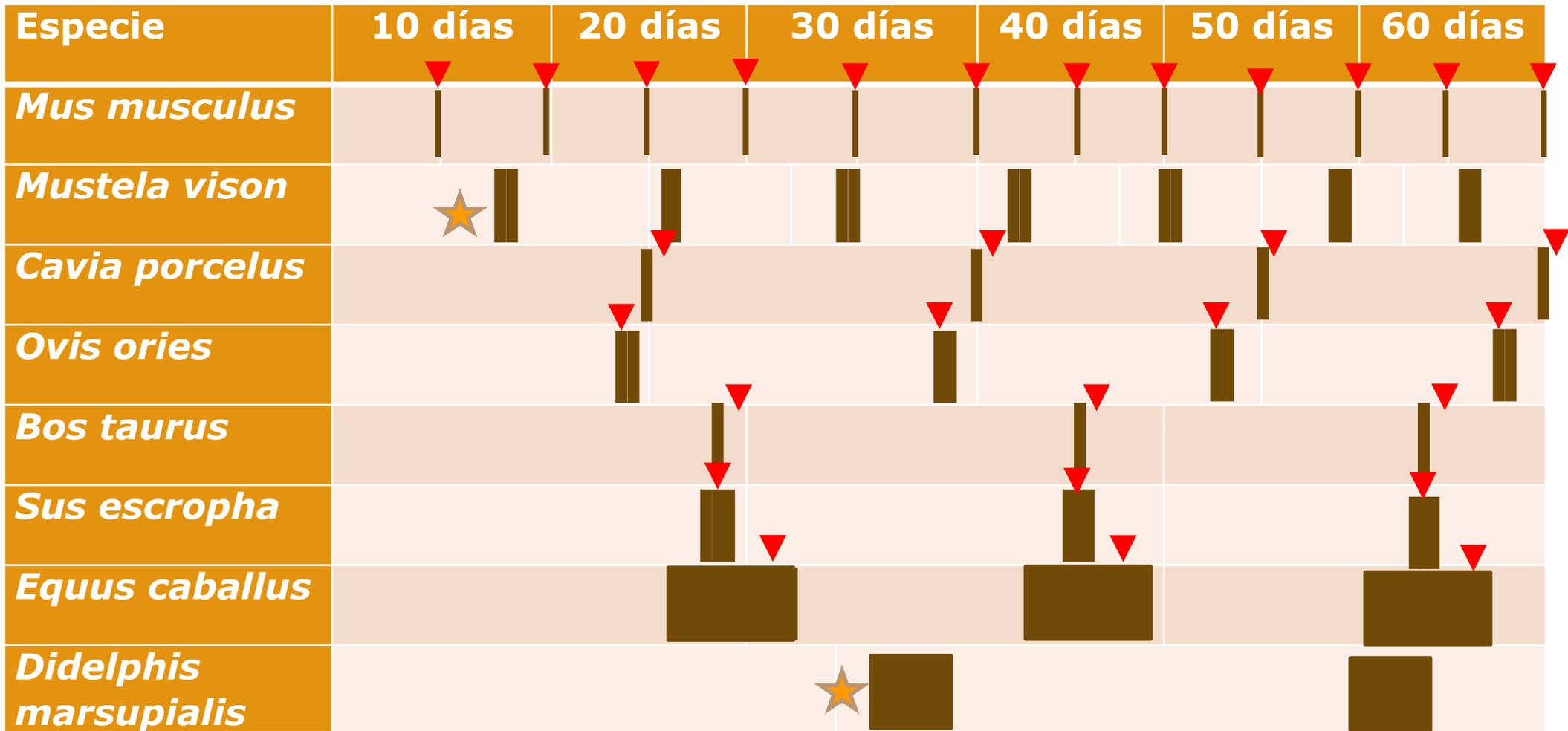


Estro



ESPECIE	CICLO	ESTRO	GESTACIÓN
	21 días	18 horas	9 meses
	21 días	4 – 7 días	11 meses
	21 días	2 – 3 días	3 meses *
	16 días	1 – 2 días	5 meses
	2 meses	7- 9 días	2 meses
	Poliéstrica estacional inducida	4 días con macho 9 días sin macho	2 meses





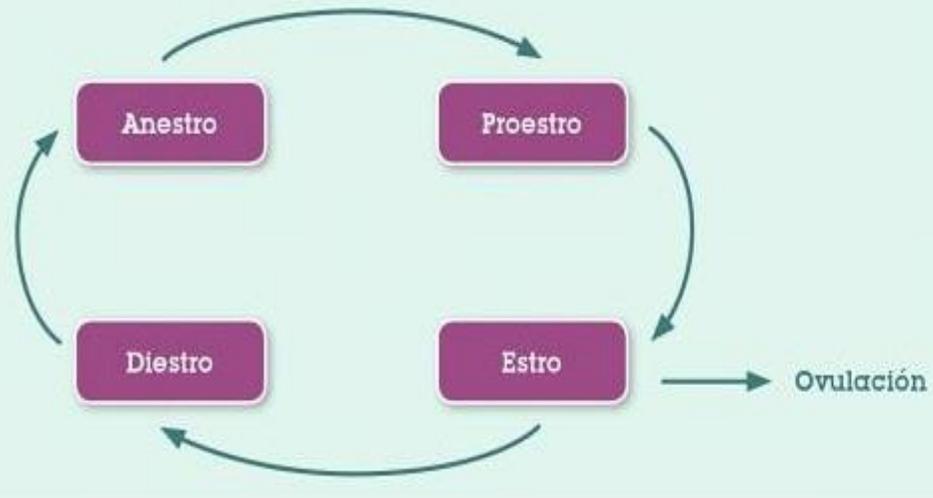
★ Ovulación inducida

▼ Día de la ovulación

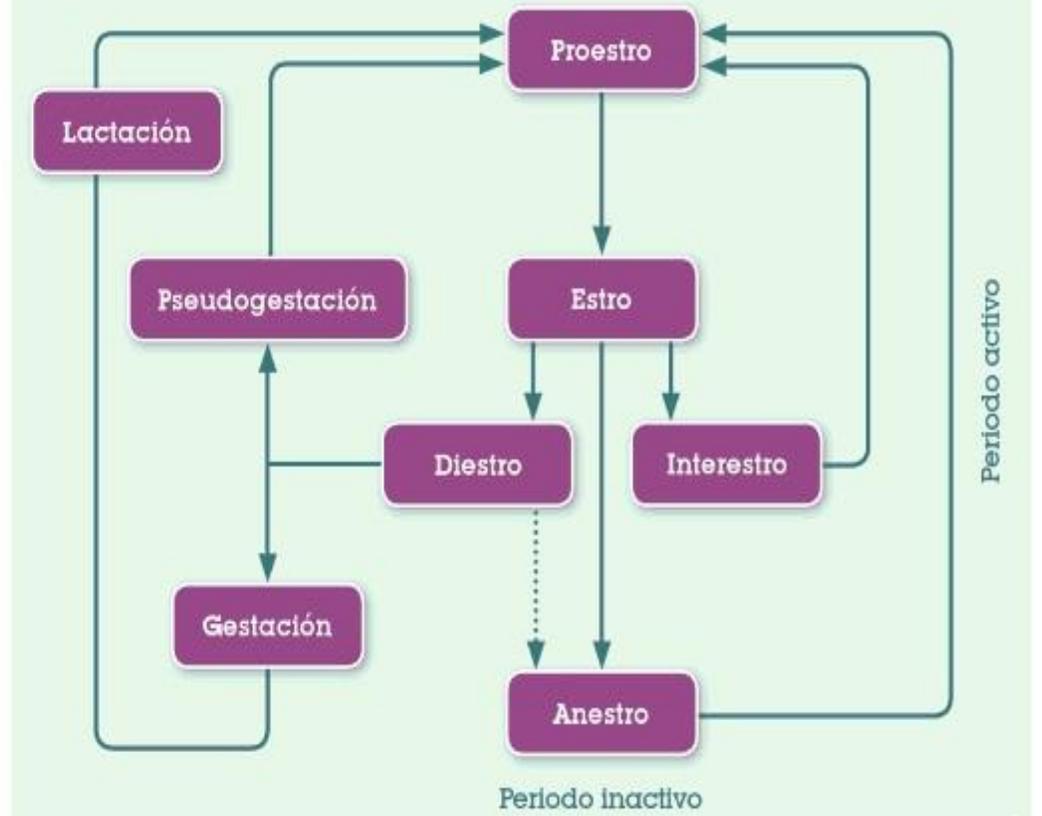




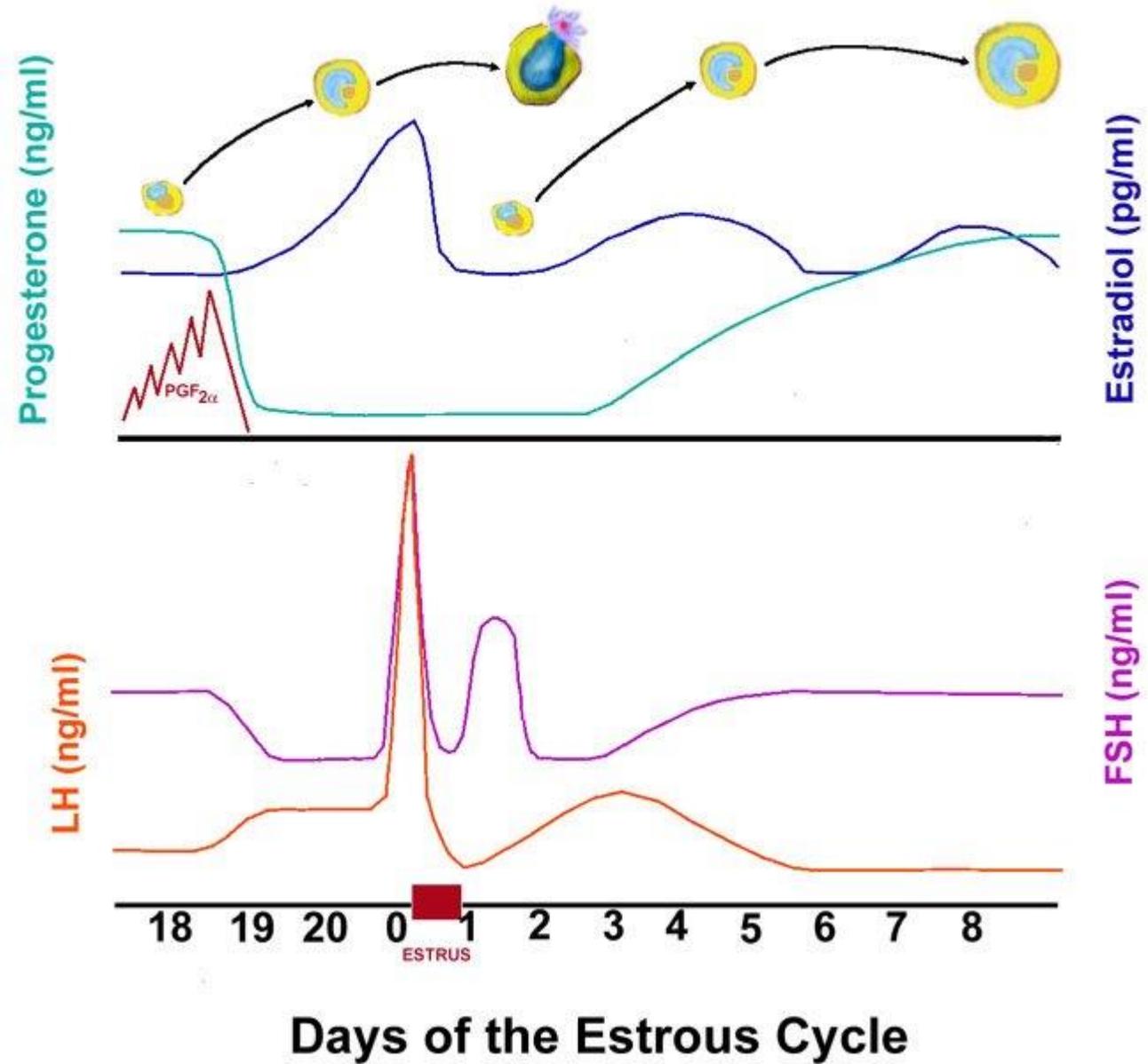
FASES DEL CICLO ESTRAL

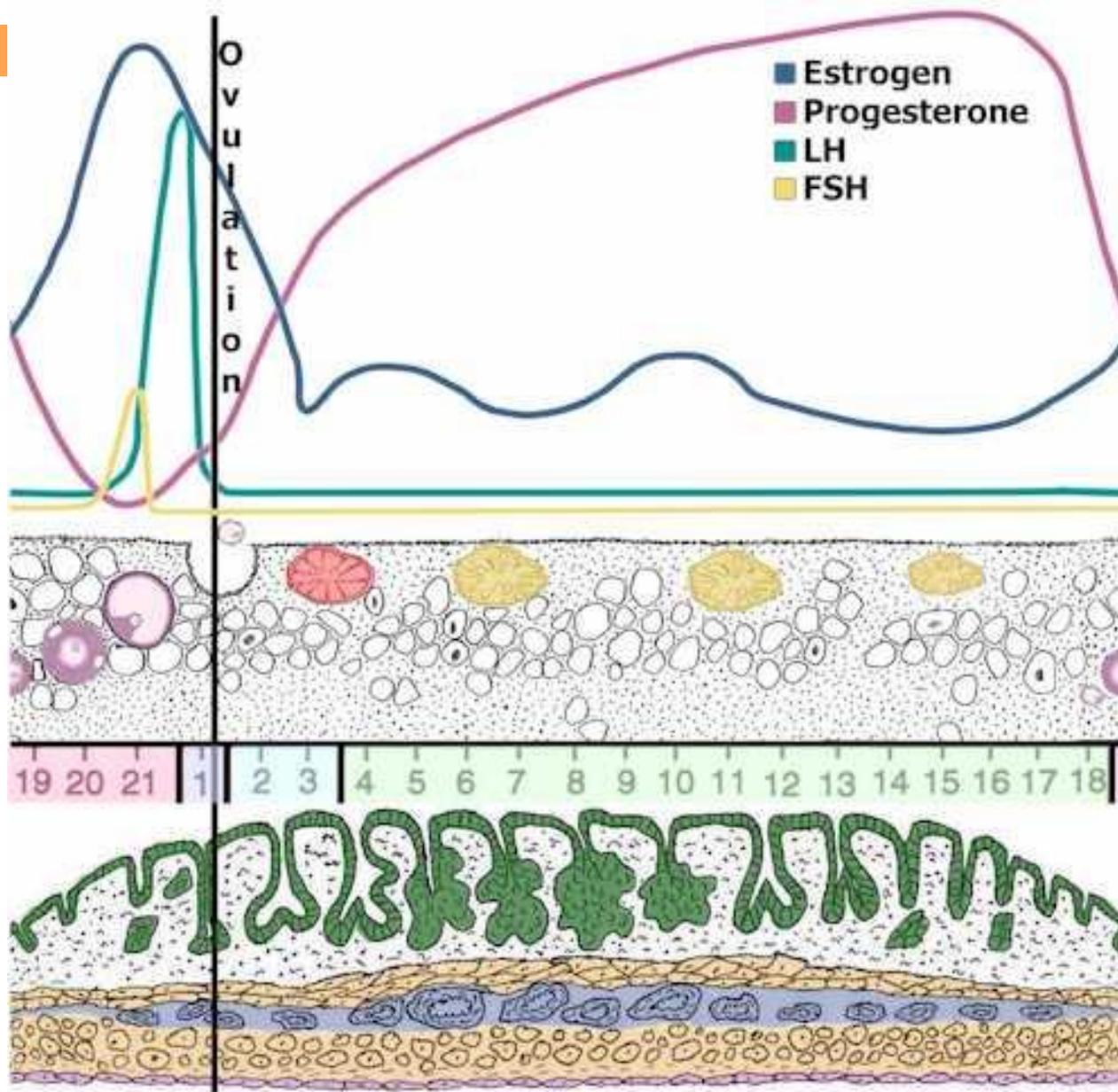


CICLO SEXUAL DE LA GATA



Cow







Ciclos menstruales

- Primates del viejo mundo (gorilas, chimpancés, orangutanes, hombre)



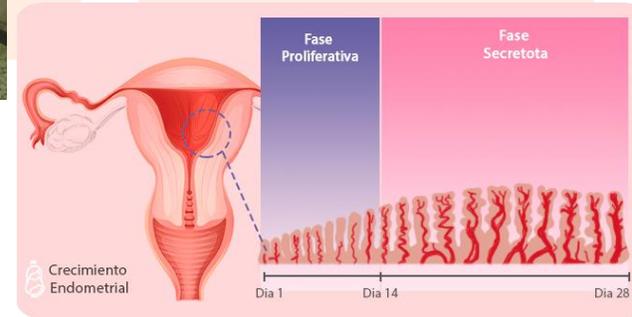
Receptividad al macho

- Permanente, no solo en el tiempo de la ovulación



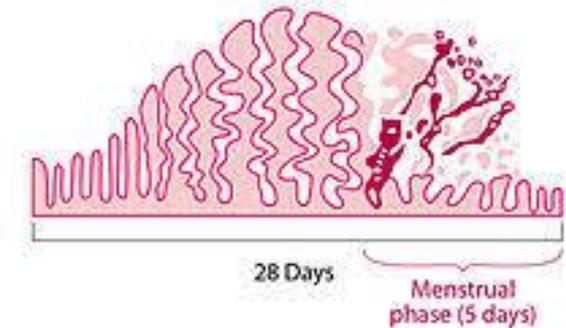
Fase luteal

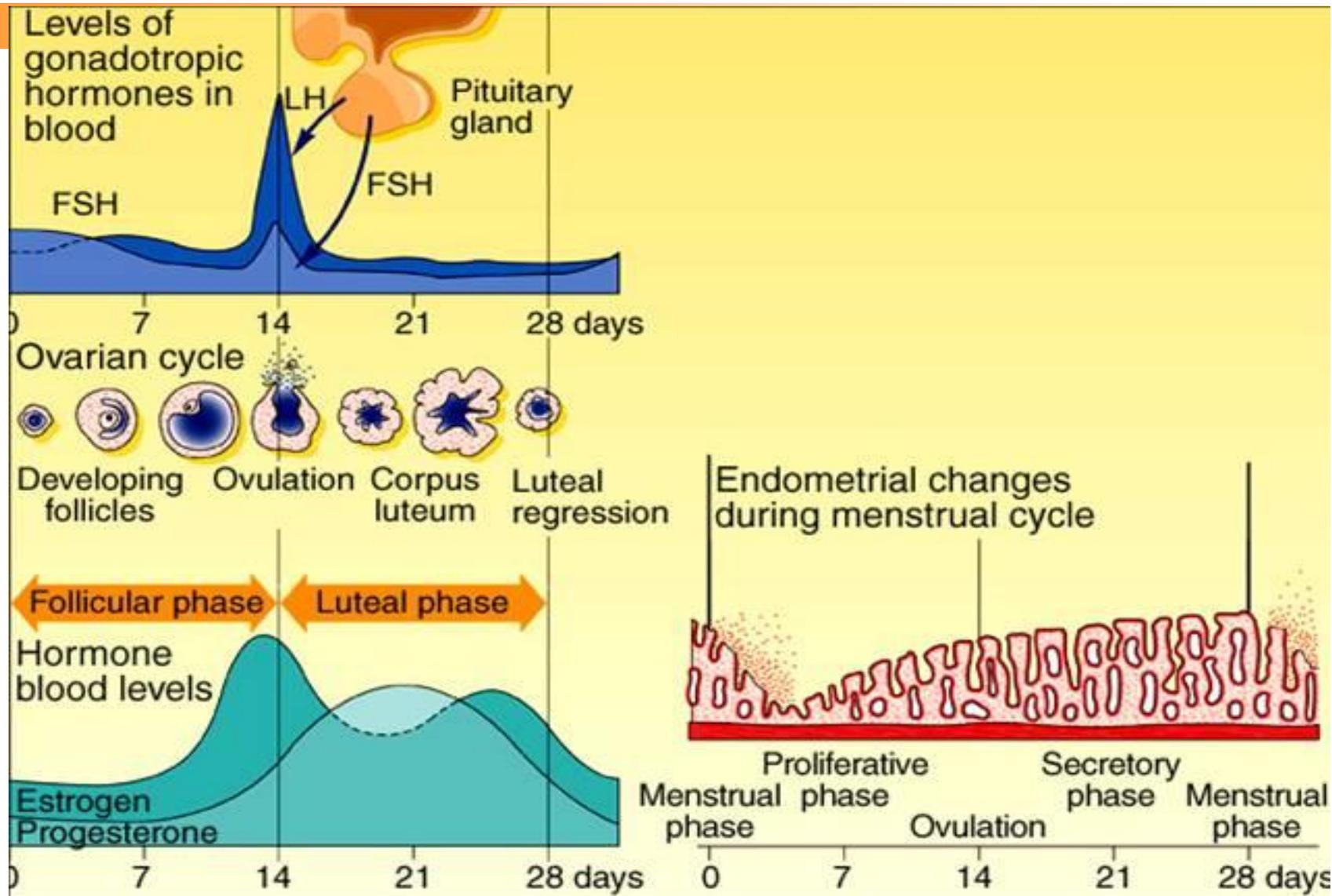
- Prolongada por un desarrollo mayor del endometrio en preparación para la implantación

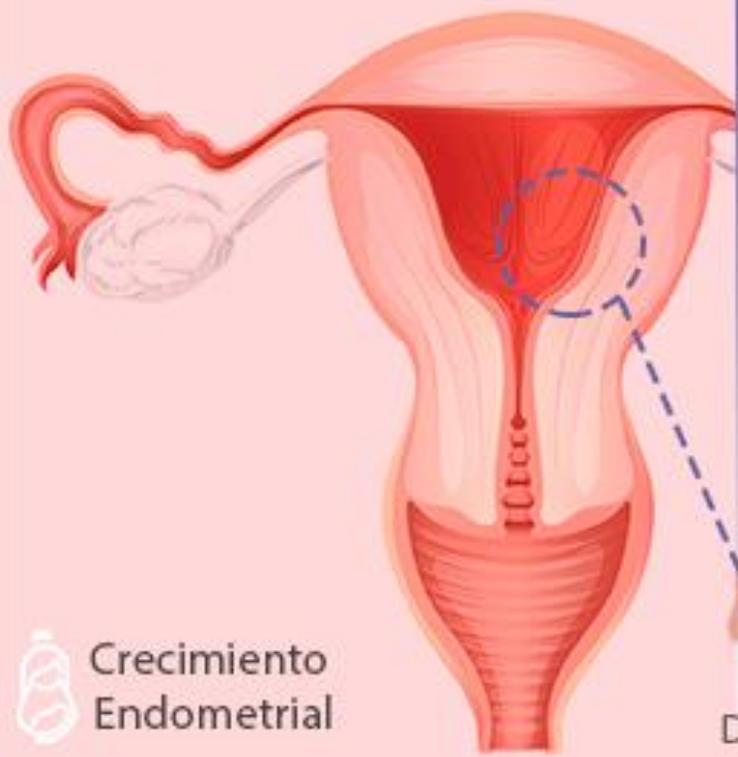


Rompimiento del endometrio

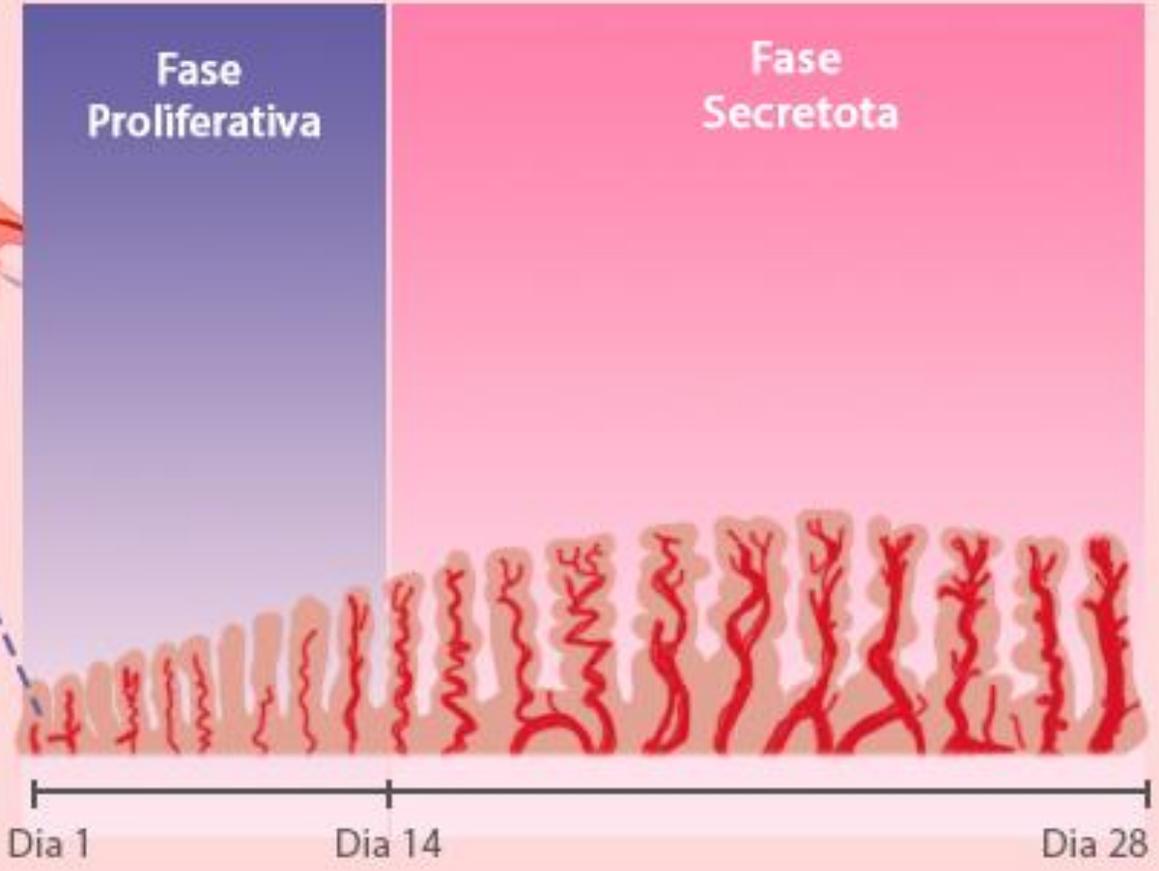
- No hay reabsorción del endometrio si no hay fertilización
- El endometrio se rompe repentinamente y se expulsa sangre y tejidos



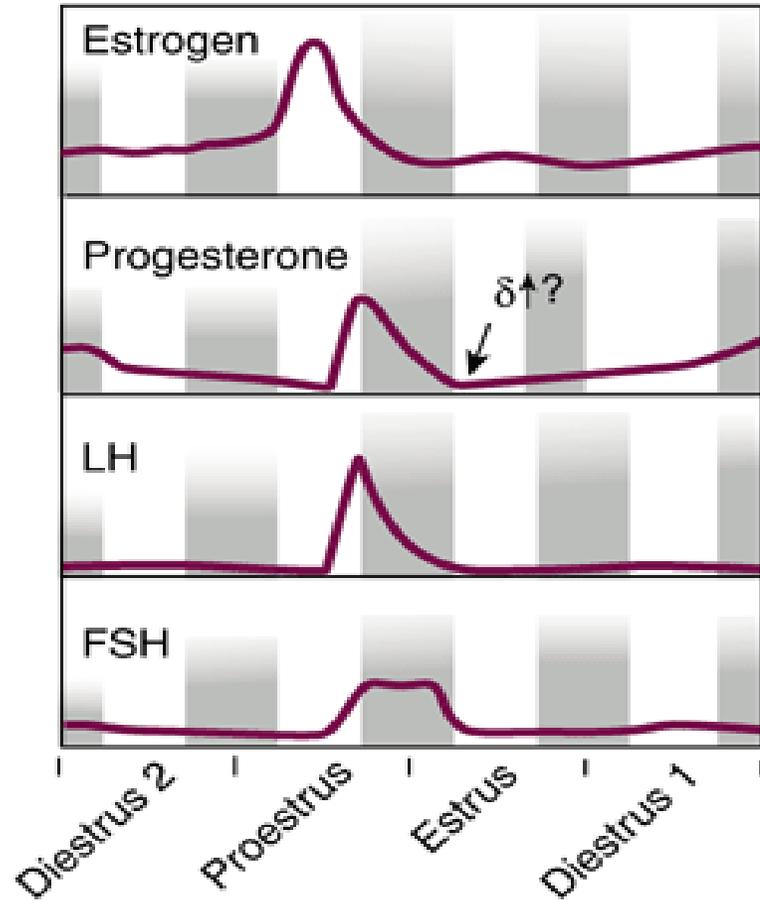




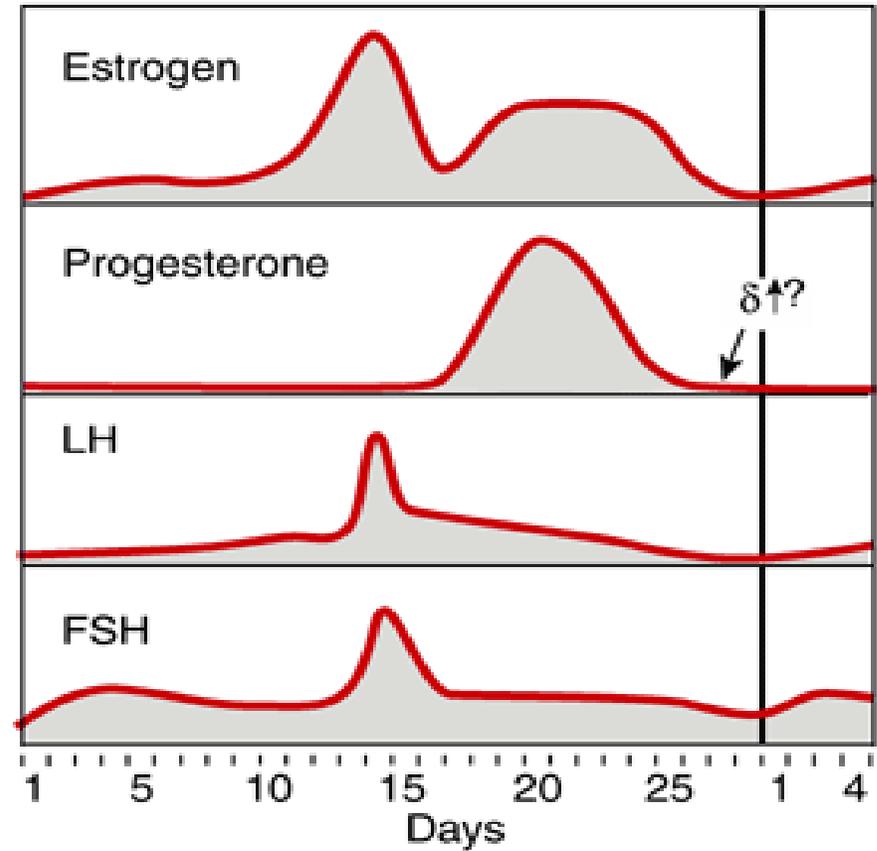
 **Crecimiento Endometrial**



a Rodent



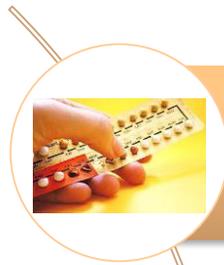
b Human



Ann Thomson



Anticonceptivos hormonales



Orales



Inyectable



Implante



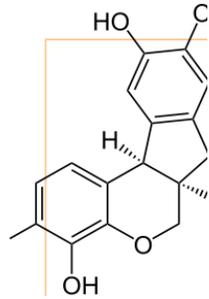
Intrauterino



orales



Mezcla de hormonas P y E) en concentraciones faseadas



Exclusivamente progestina



Del día después

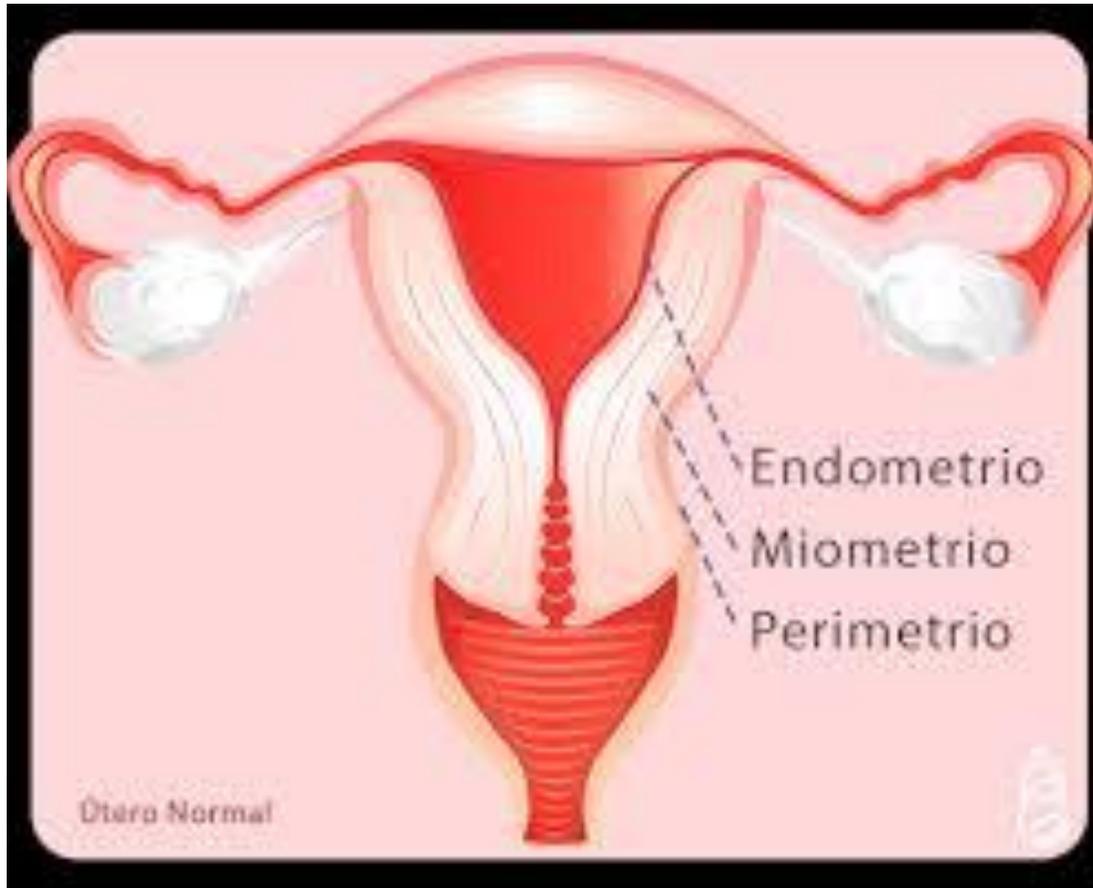


Suprimen el pulso de la GnRH

Niveles mínimos de FSH y LH

No hay ovulación





Endometrio hostil

Hiperproliferación del endometrio

Moco grueso a nivel del cérvix



Sistema cardiovascular

- Riesgo de trombosis y tromboembolismos
- Más riesgo con los implantes en el brazo
- Hipertensión
- Incremento en factores de coagulación

Manejo de las grasas

- Elevados niveles de triglicéridos plasmáticos
- Dislipidemia e intolerancia a la glucosa

Desarrollo de cáncer

- Cáncer de mamas
- Cáncer de útero, mas riesgo para cervical
- Adenoma hepático

Otros efectos

- Incremento en migrañas
- Acné e hirsutismo
- Náusea y edemas localizados



