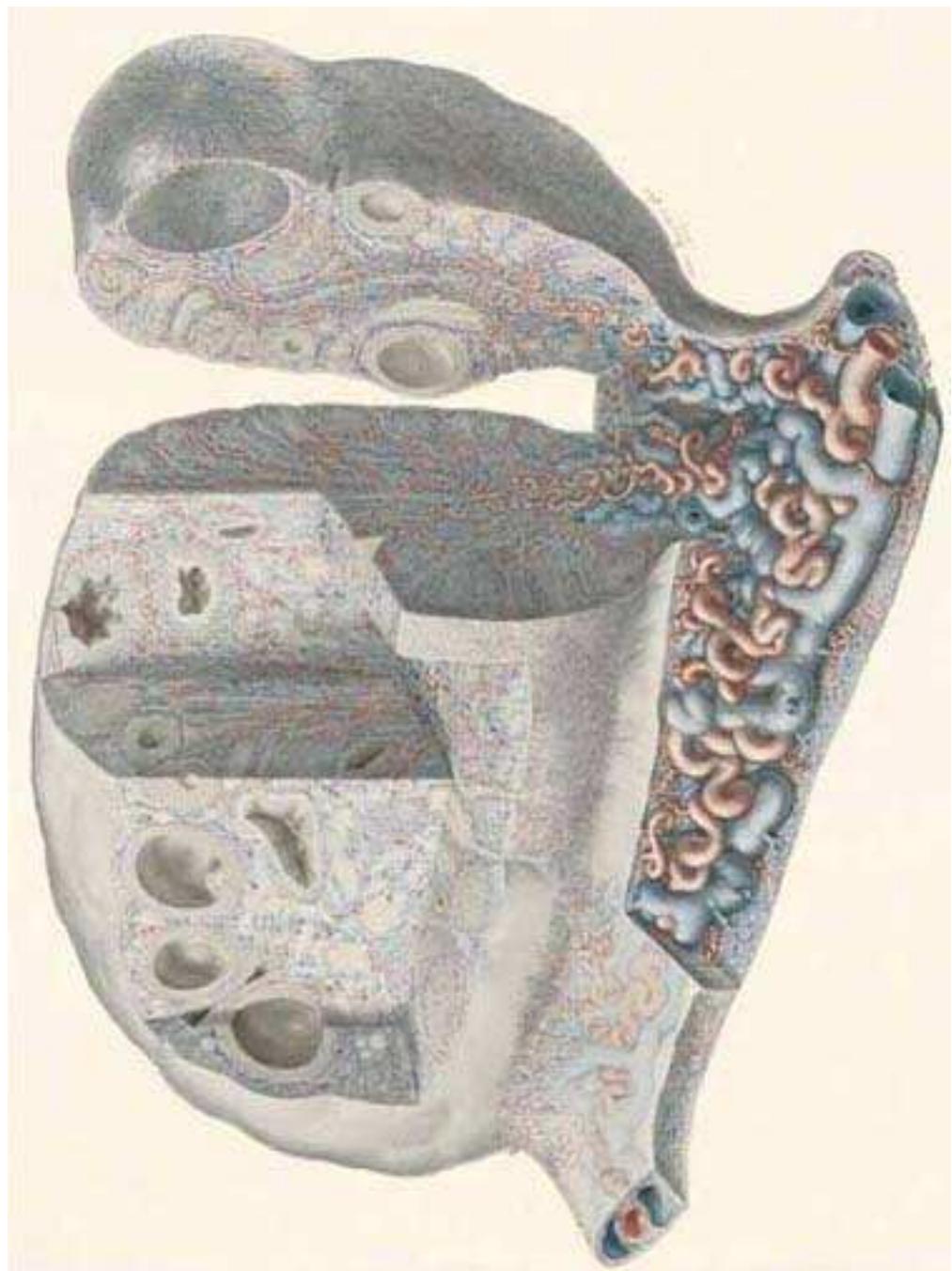
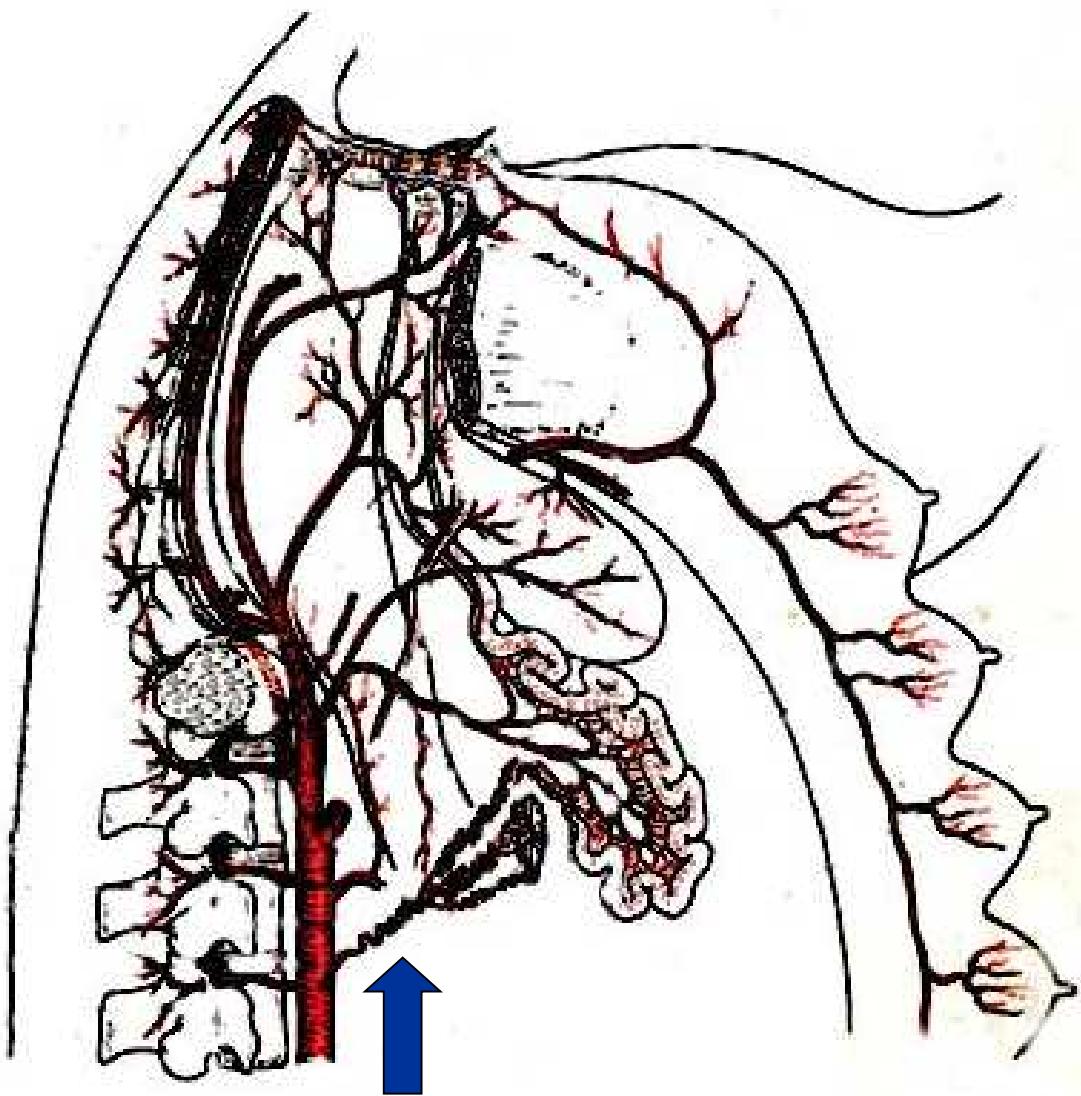
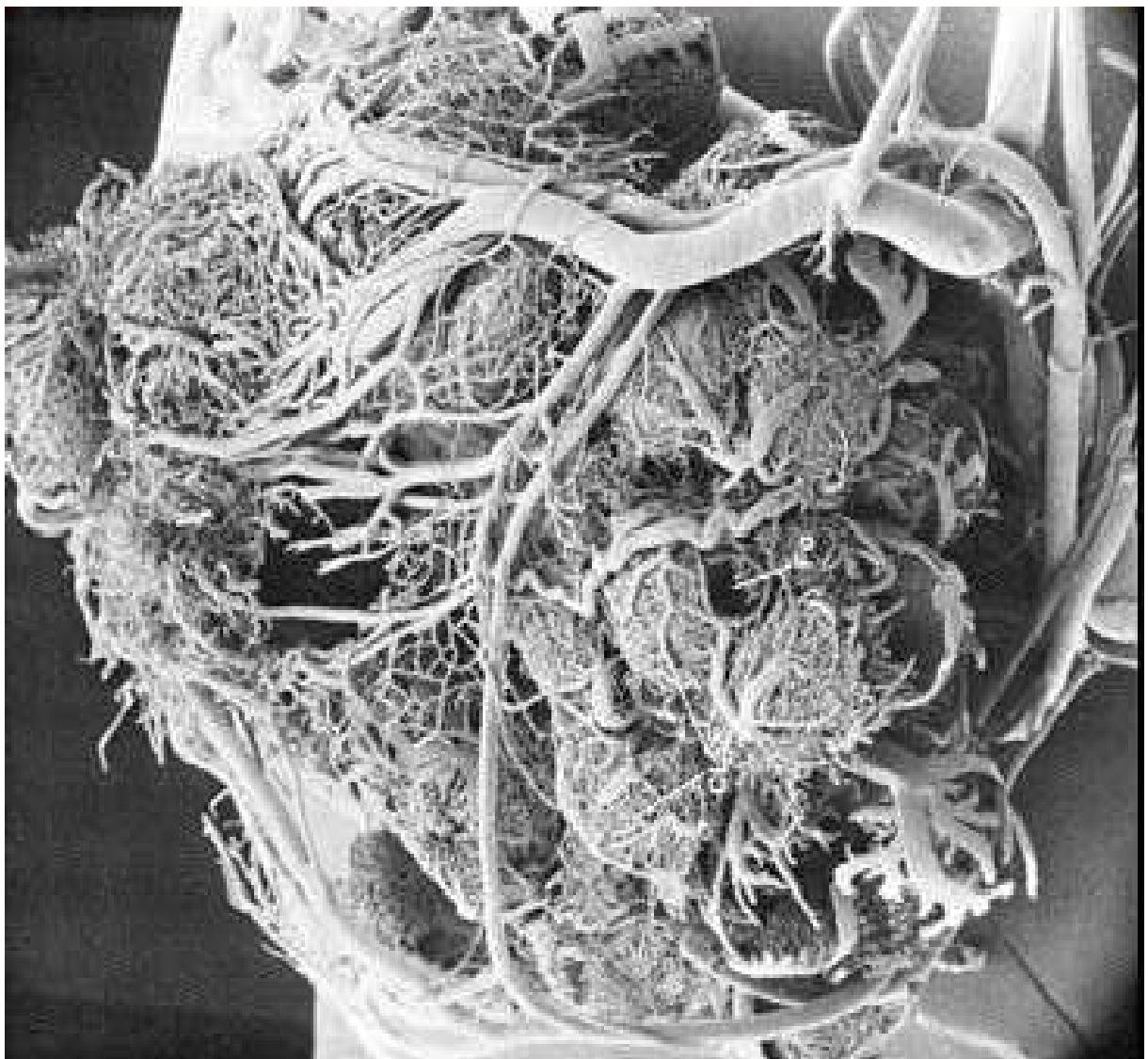
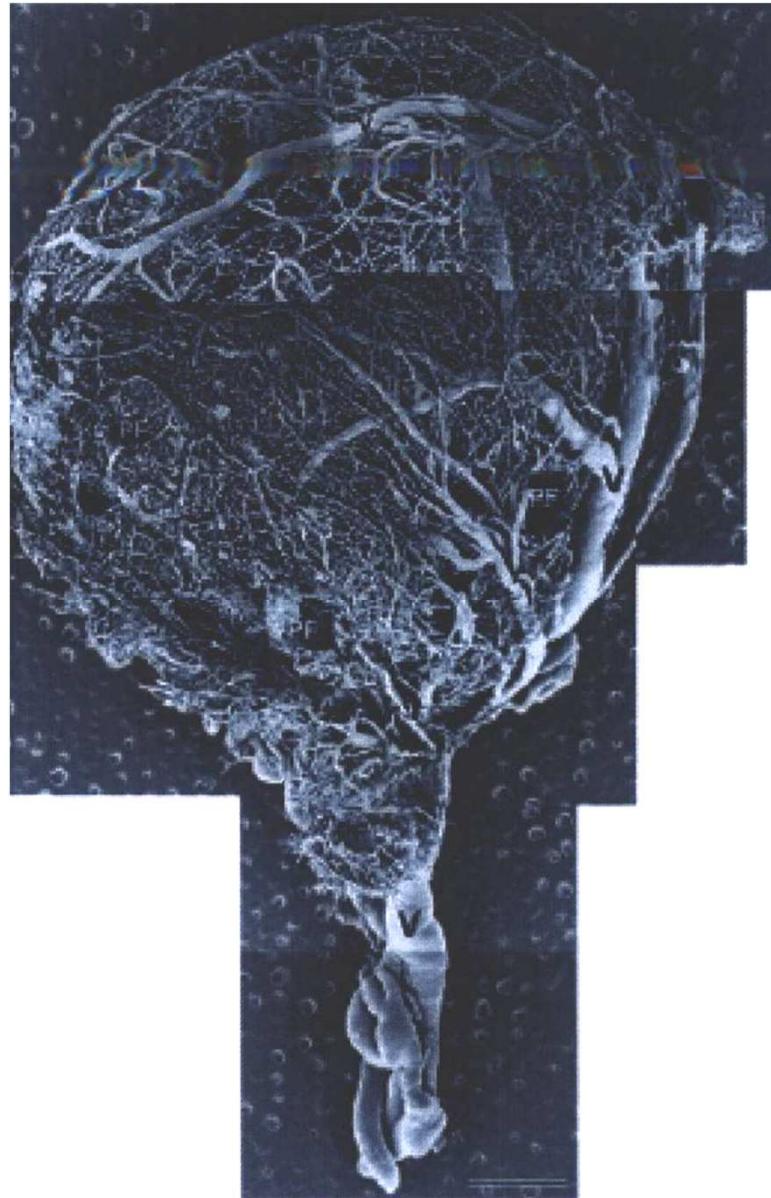
A black and white photomicrograph of ovarian tissue. It shows several large, clear, circular spaces which are ovarian follicles at different stages of development. Some of these follicles contain a dark, circular egg cell. A dense network of thin, dark lines representing blood vessels weaves through the tissue, surrounding the follicles.

# Ovarian folliculogenesis and angiogenesis







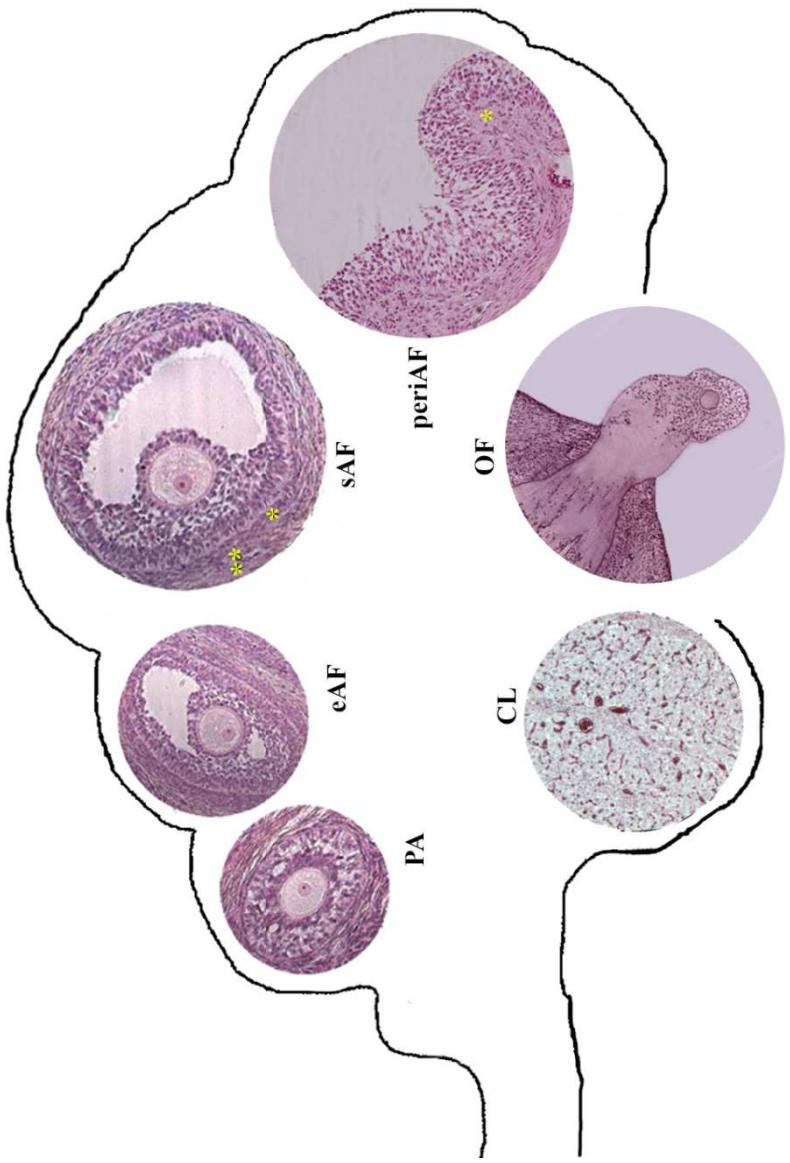


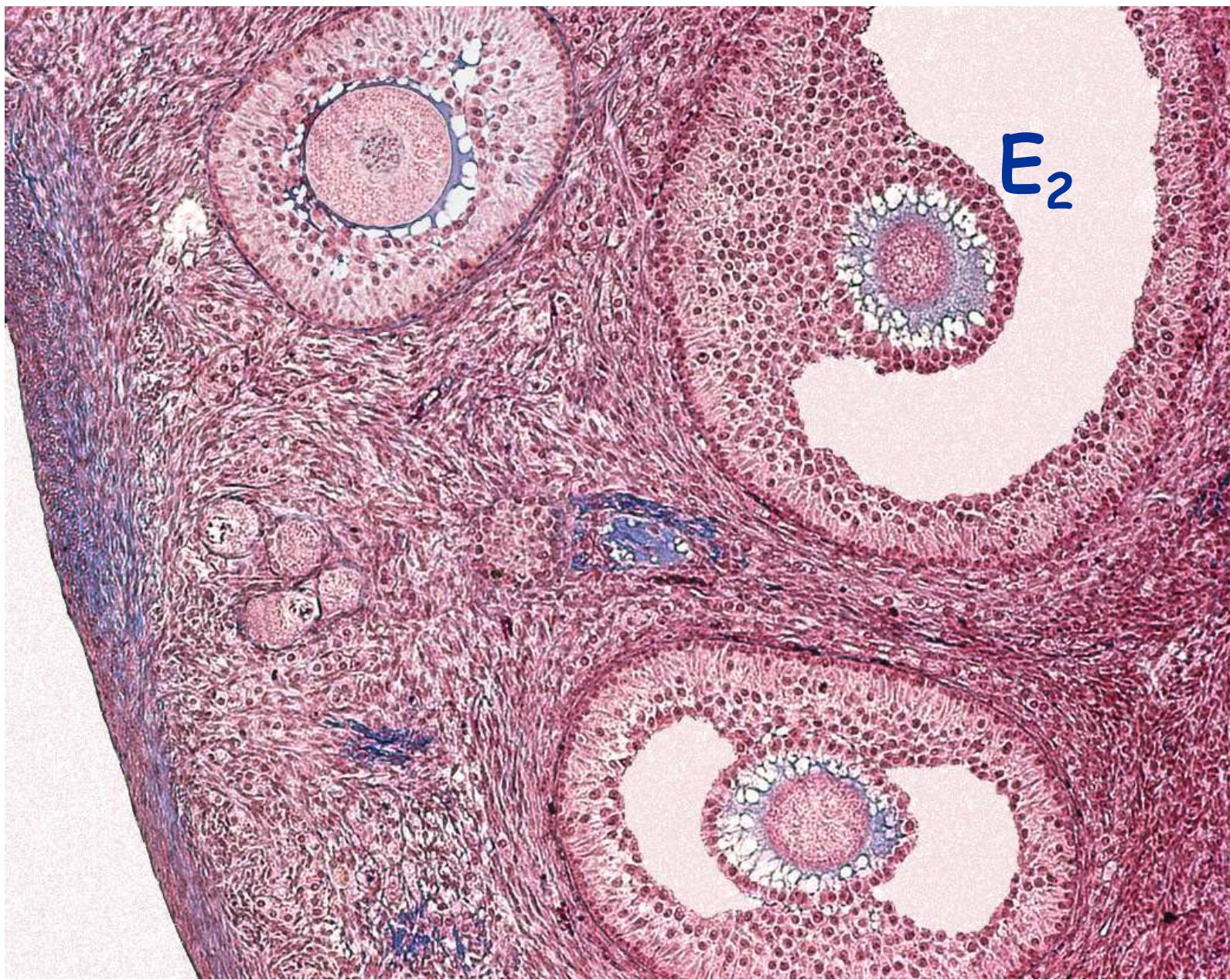
Jiang JY et al., *Reproduction* 2003; 125:211-23



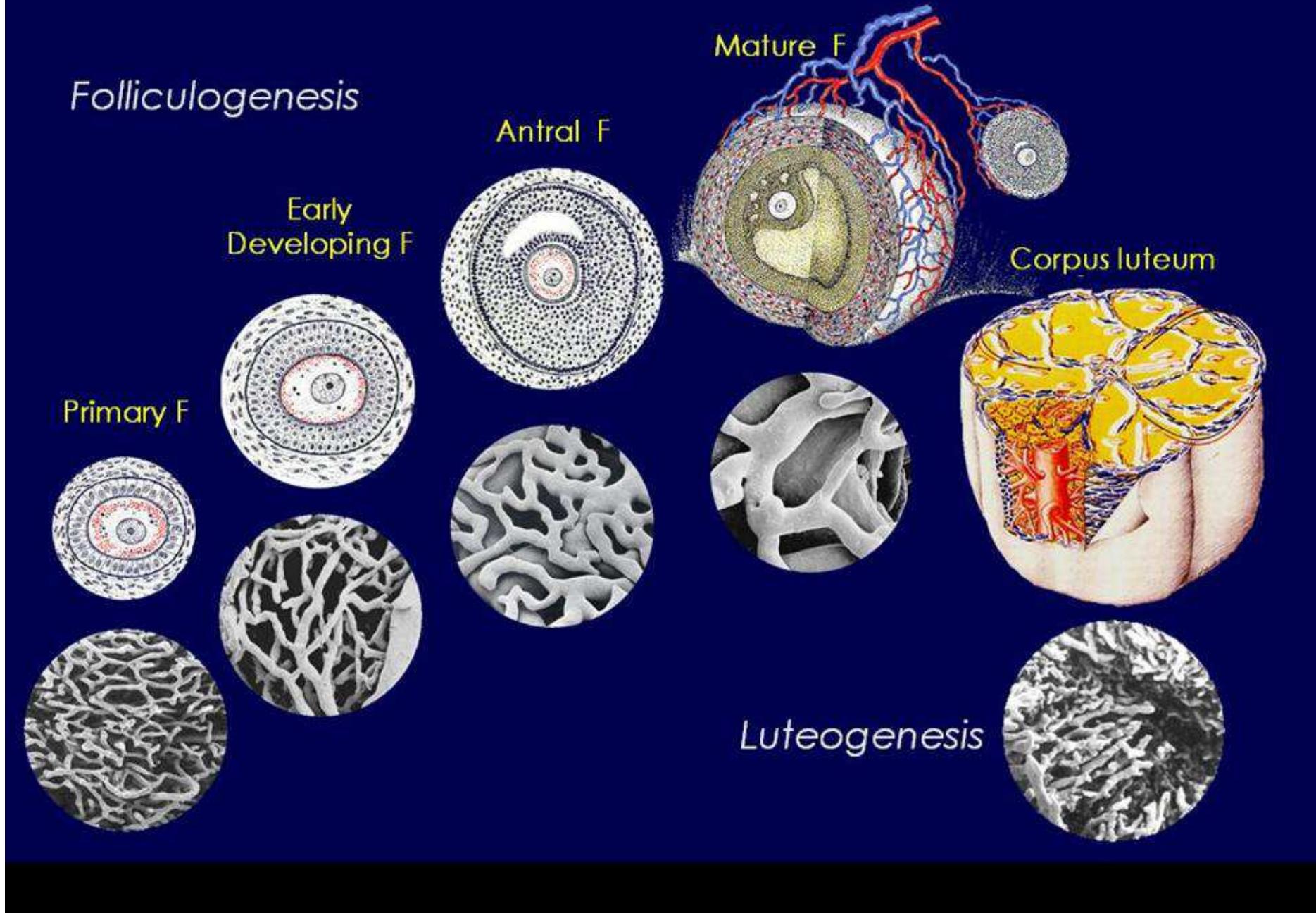
da A.D. Forsman and J.T. Mc Kormack; *The Anatomical Record*, 1992

OVARIAN FOLLICULAR MORPHOLOGY

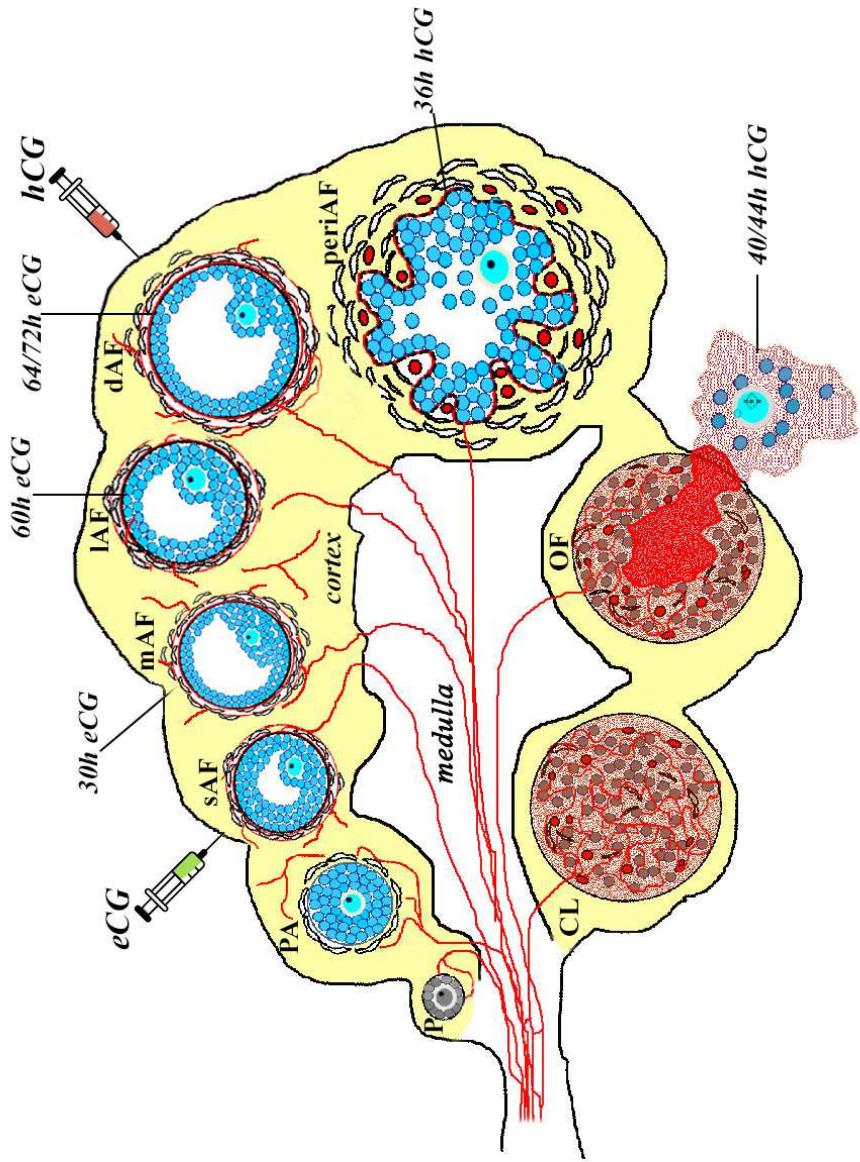




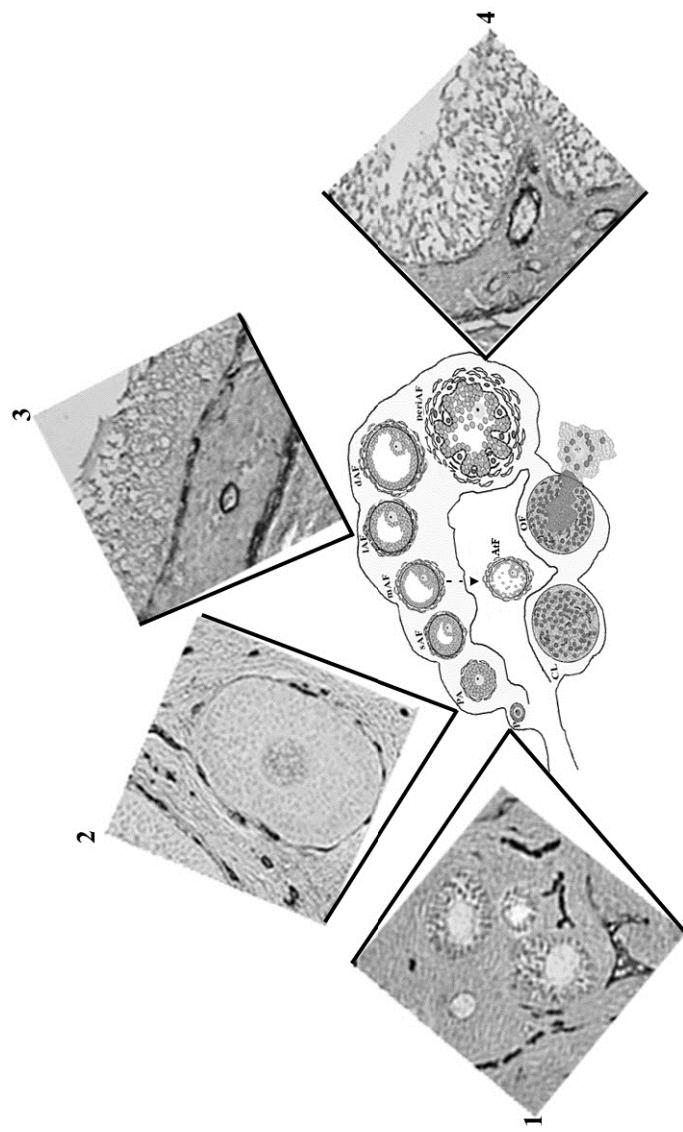
# Factors influencing vascular remodeling in the ovary

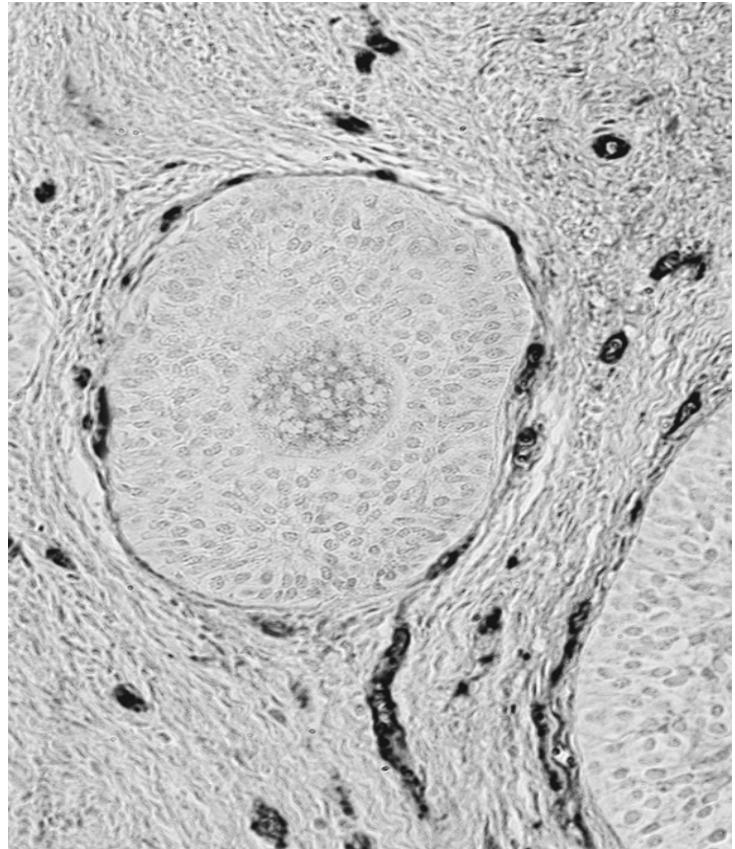
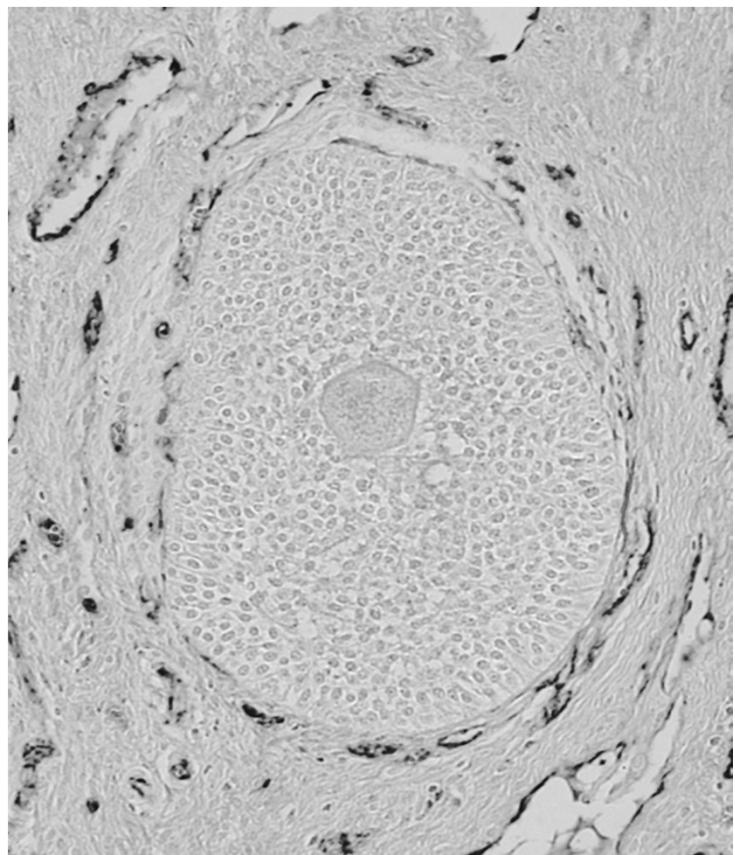
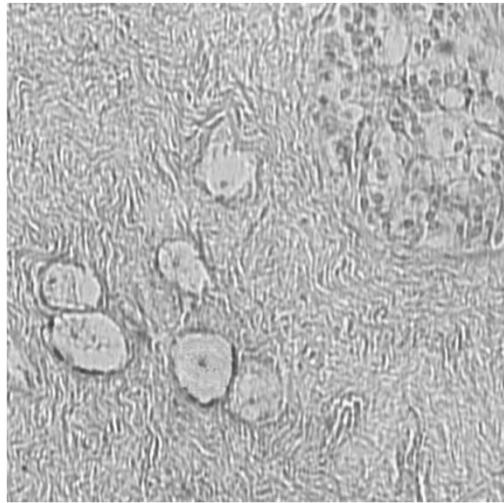


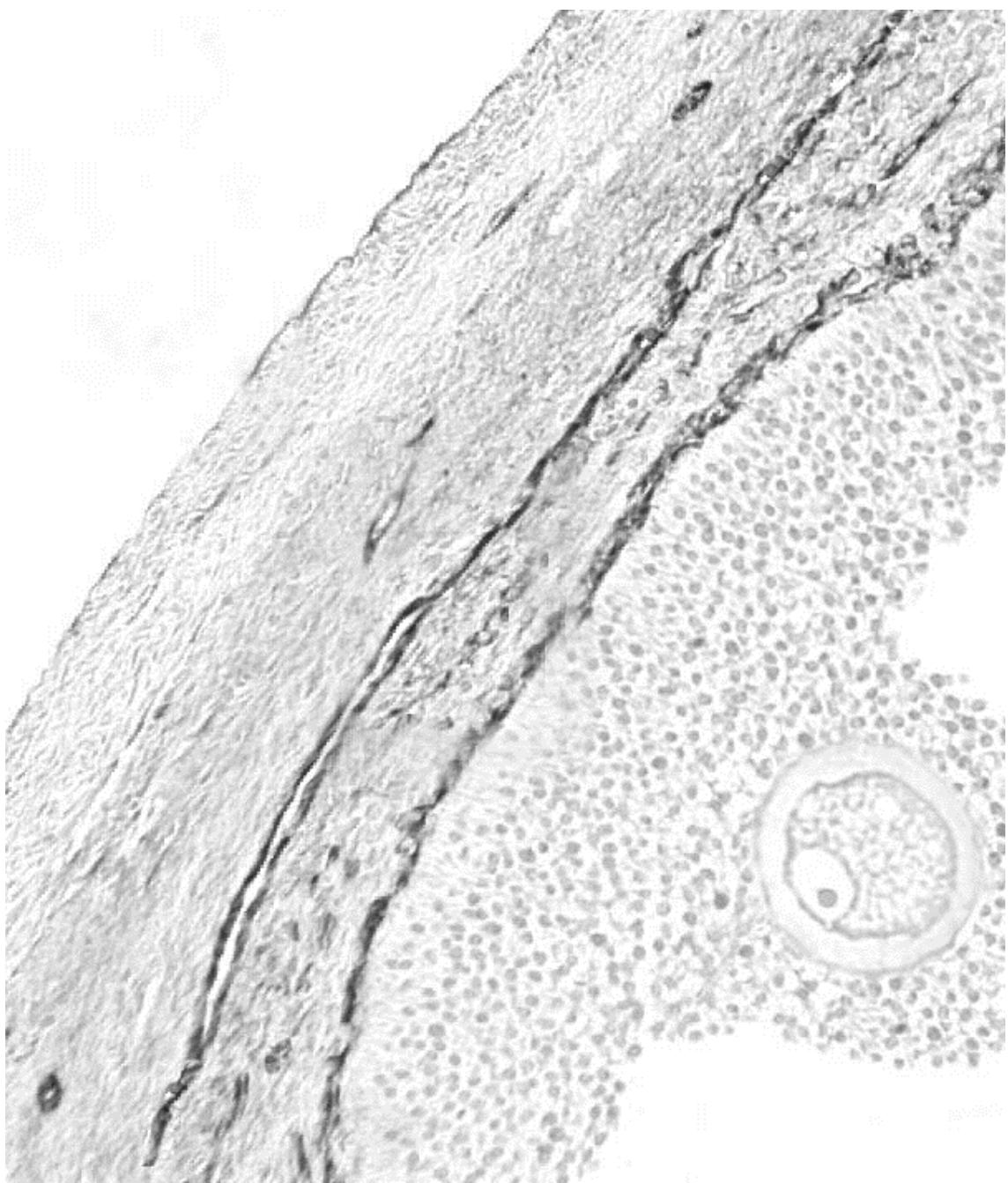
OVARIAN FOLLICULAR PHASE  
BY HORMONAL PHARMACOLOGICAL TREATMENT

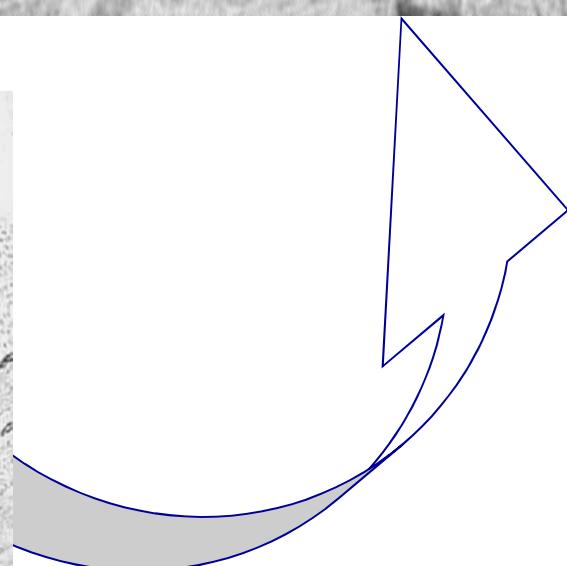
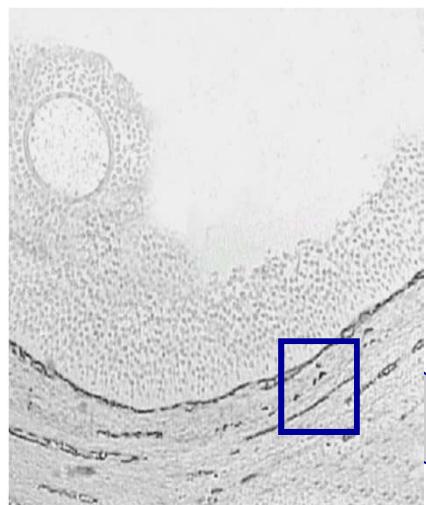
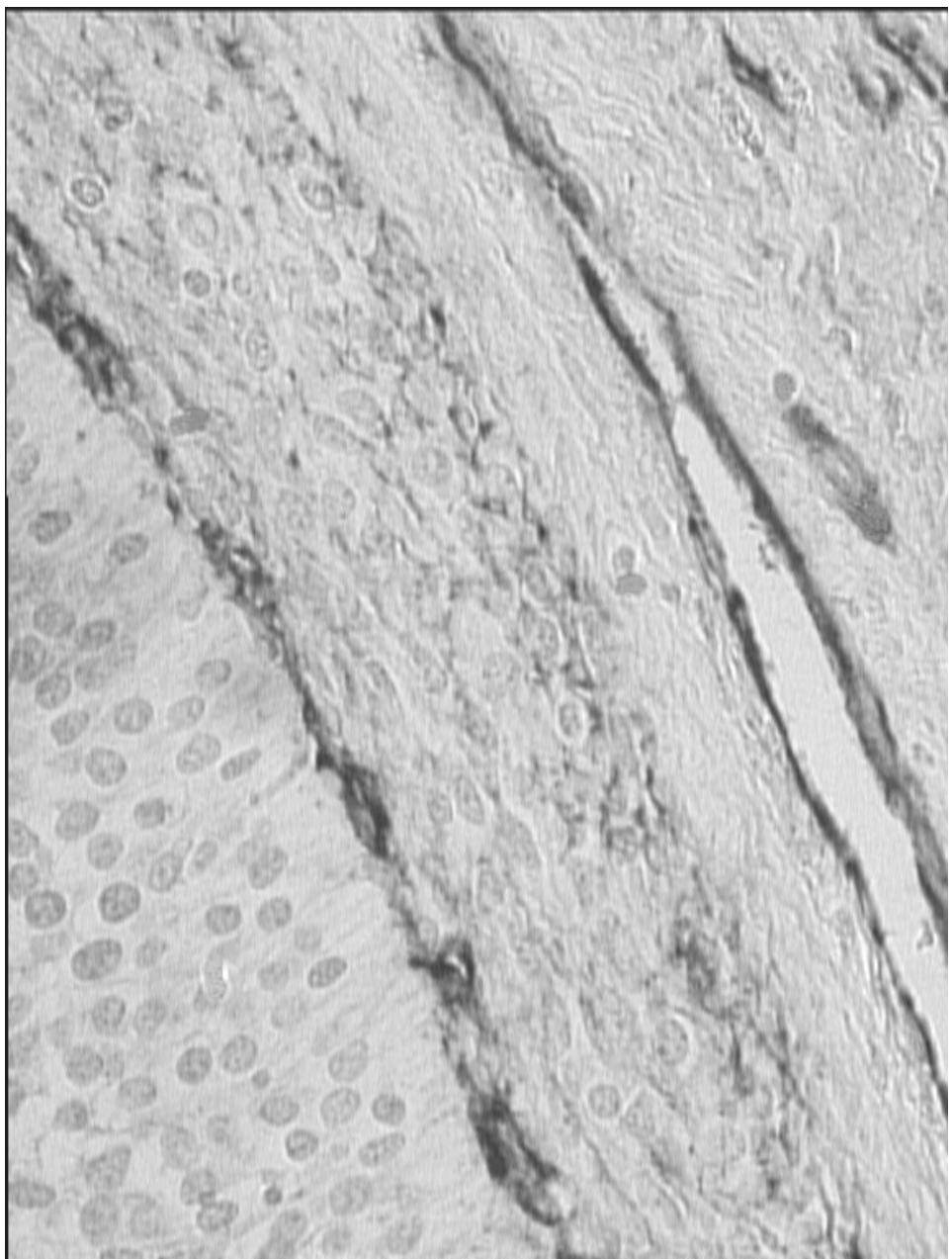


OVARIAN FOLLICLES VASCULARIZATION

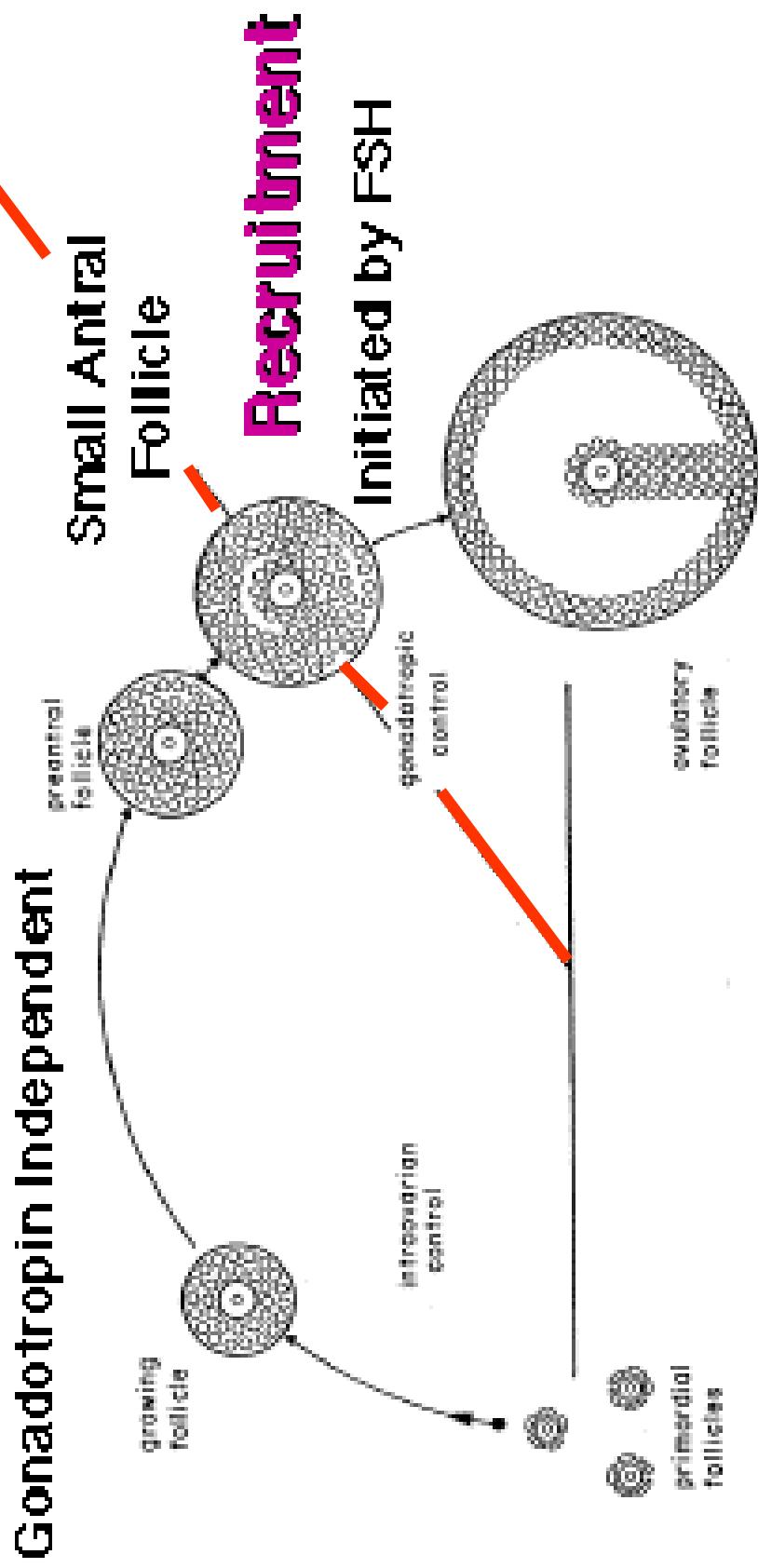


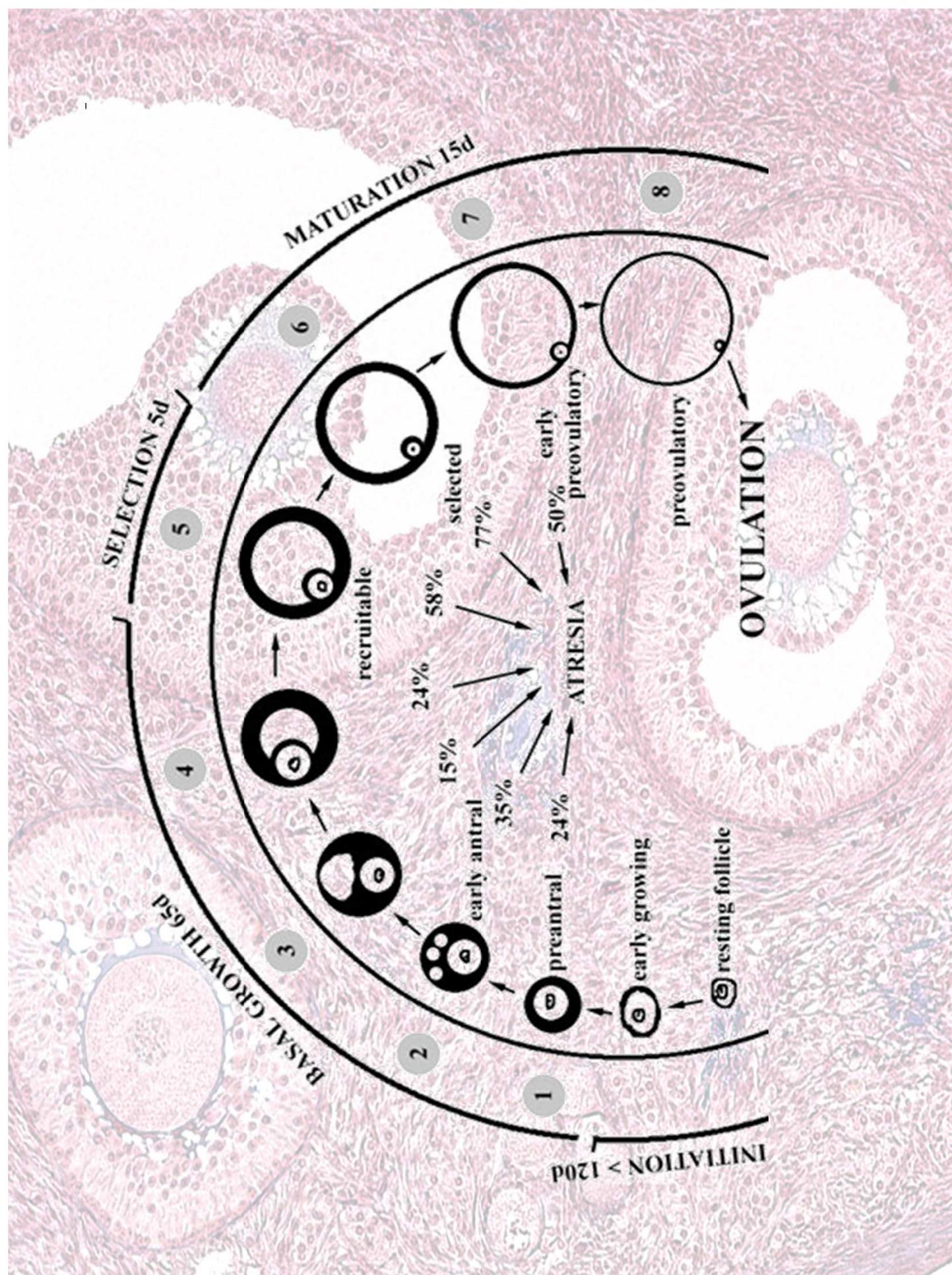




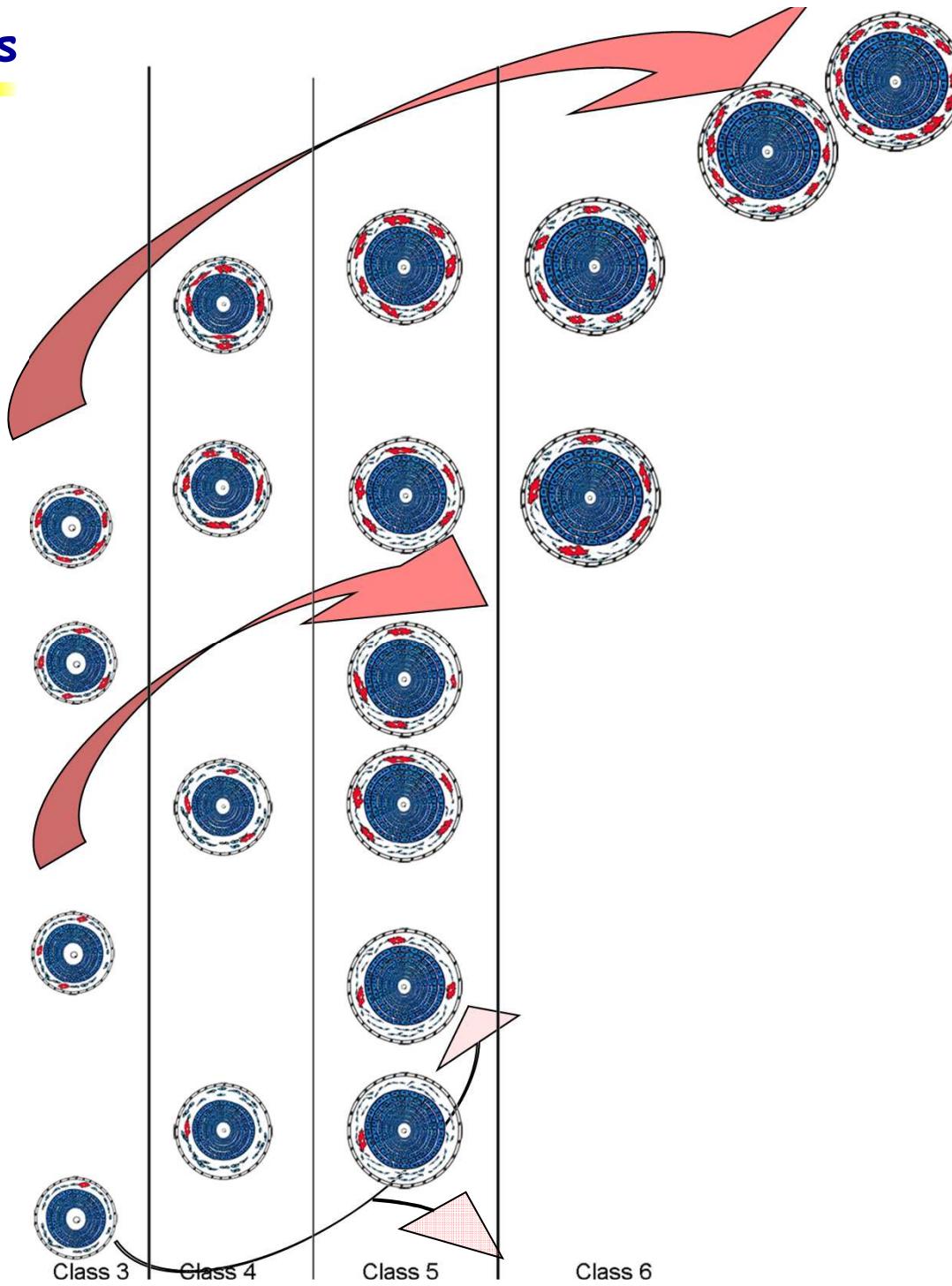


# Follicular Growth

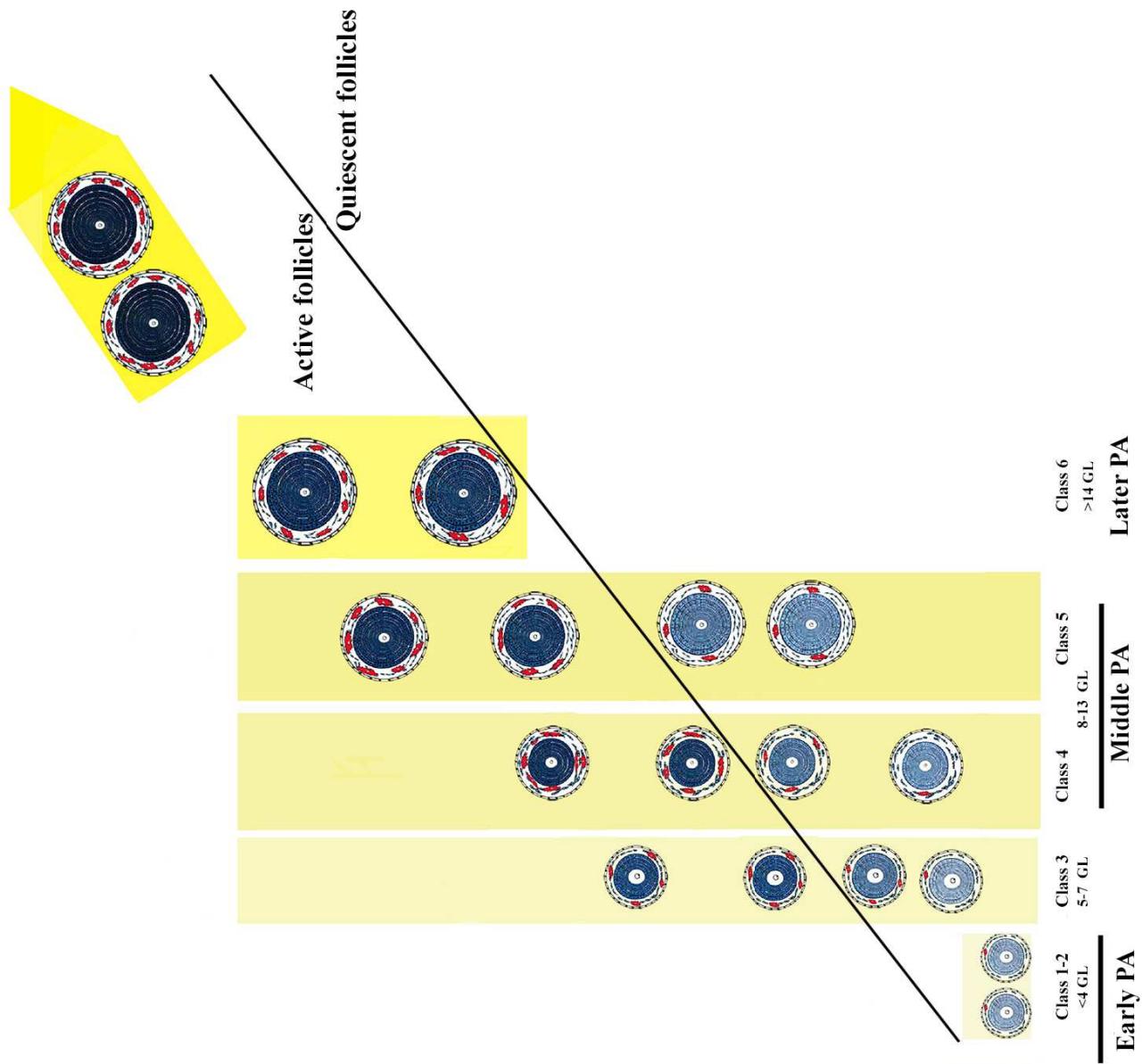




## Preadntral follicles

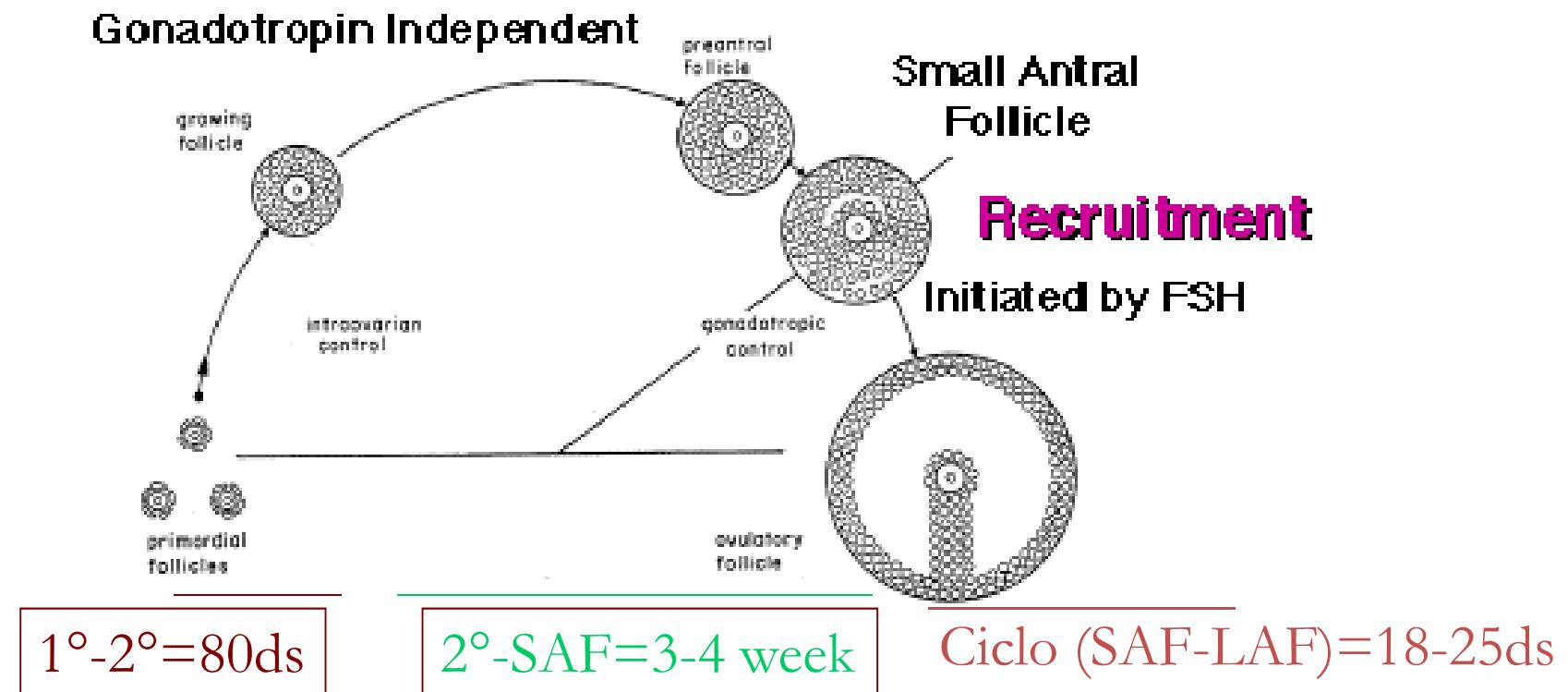


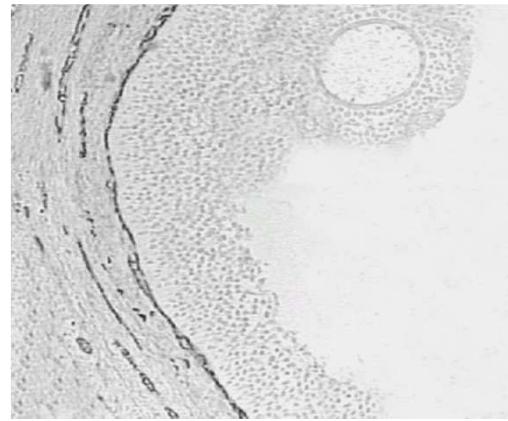
## PREANTRAL FOLLICLES



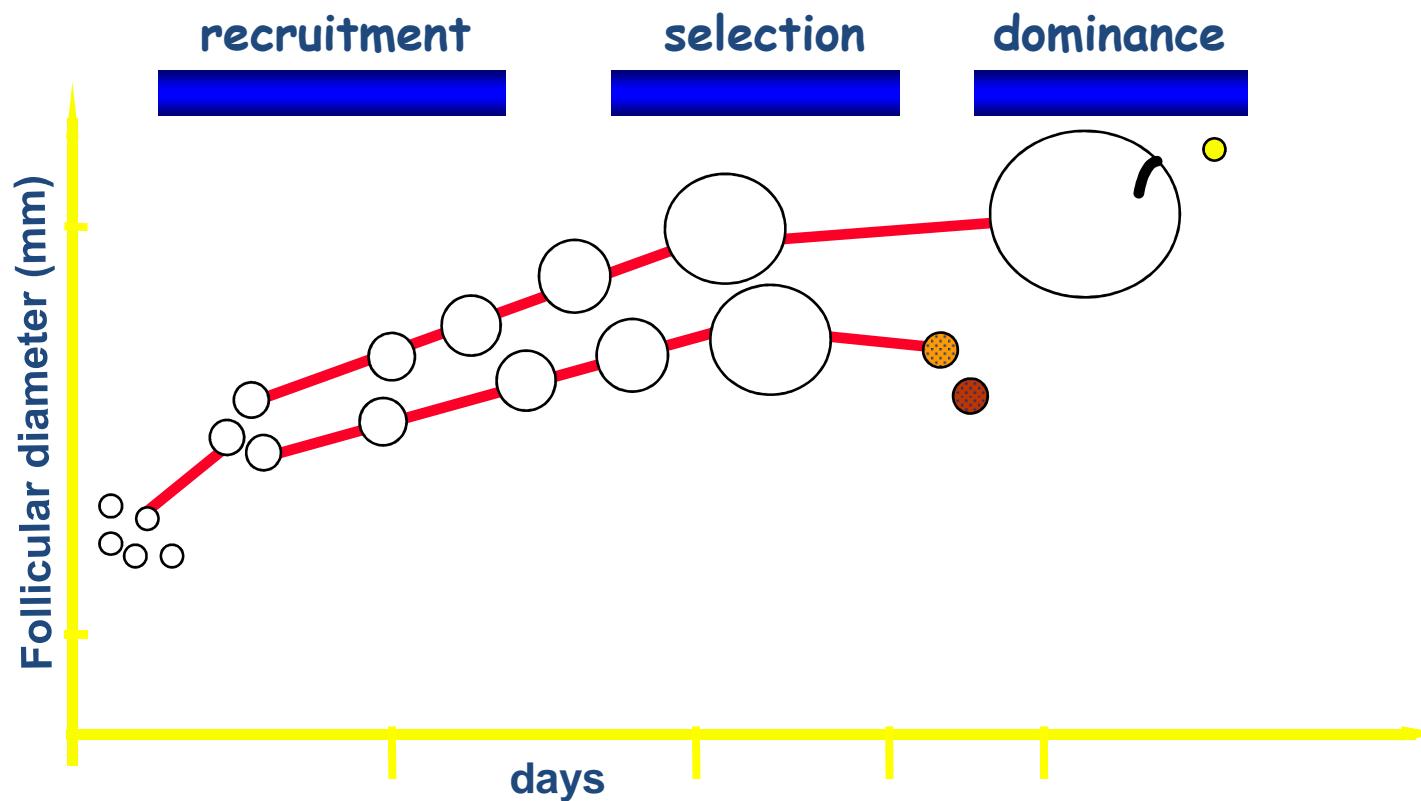
SOW

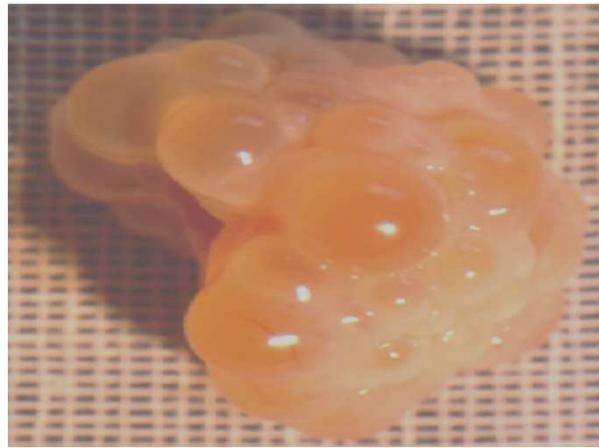
# Follicular Growth



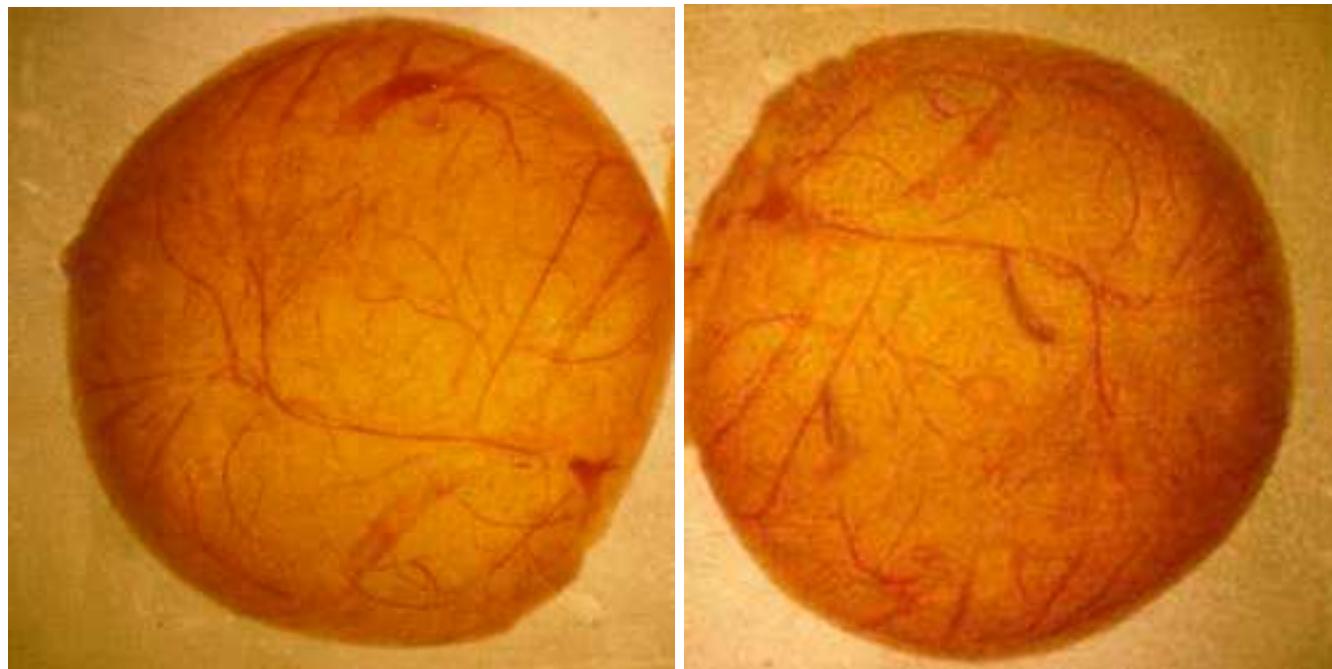


## estrus cycle

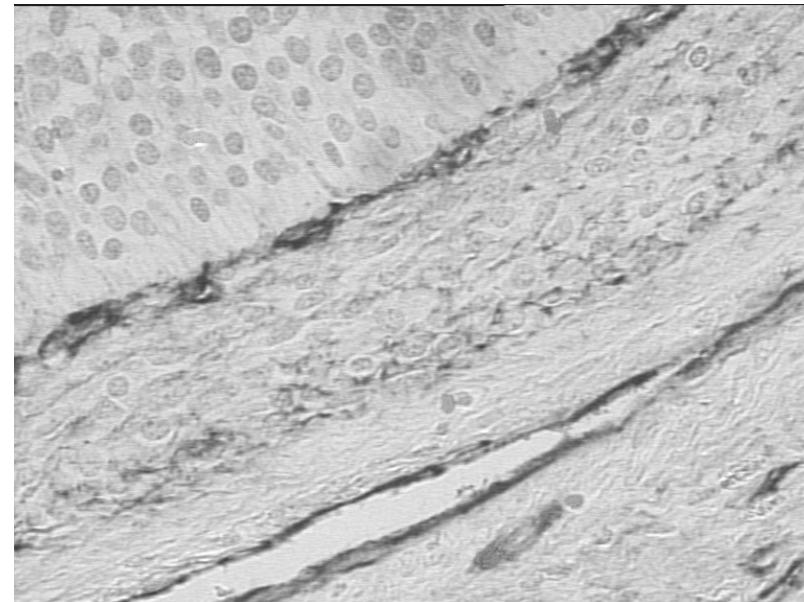
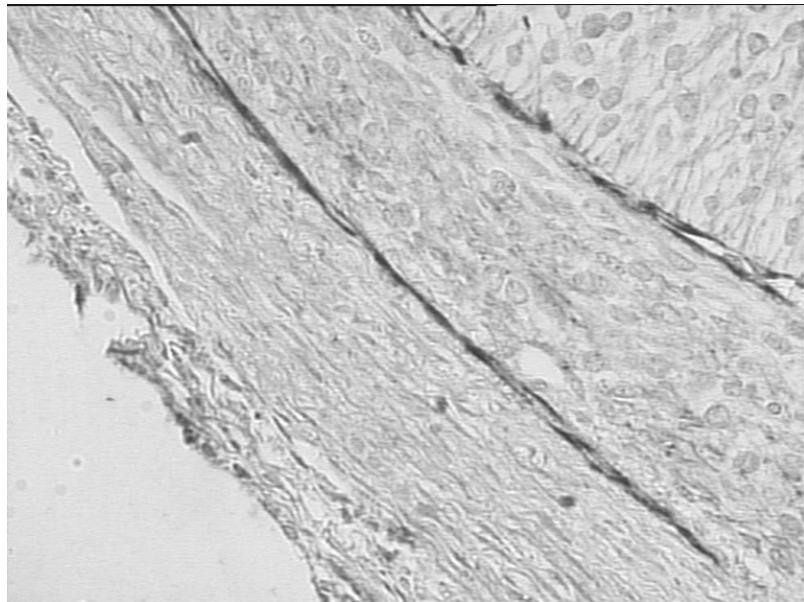




**medium antral follicles**



## medium antral follicles



Total VA

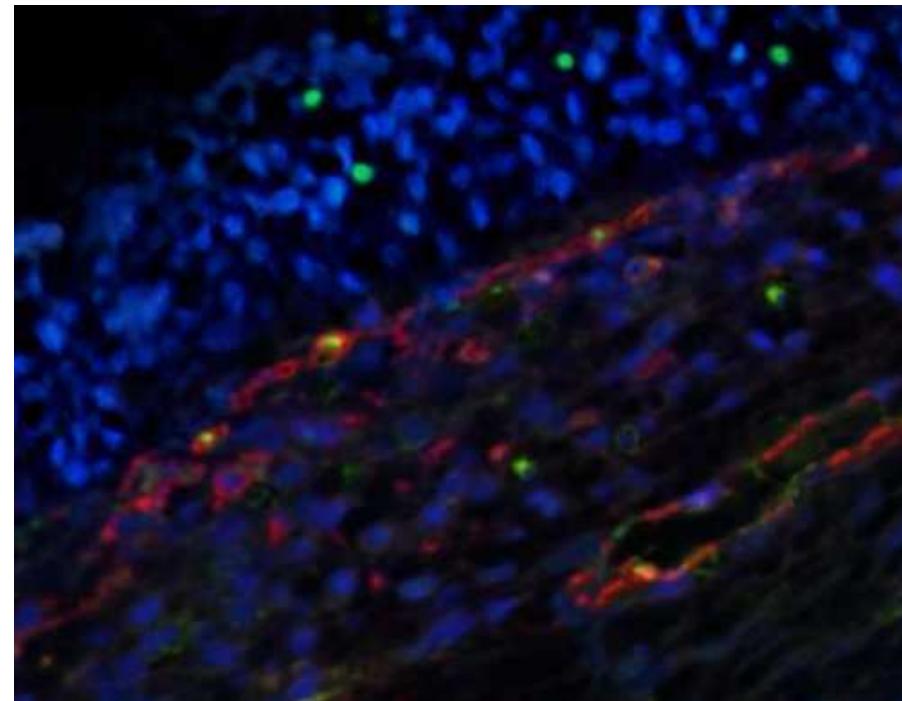
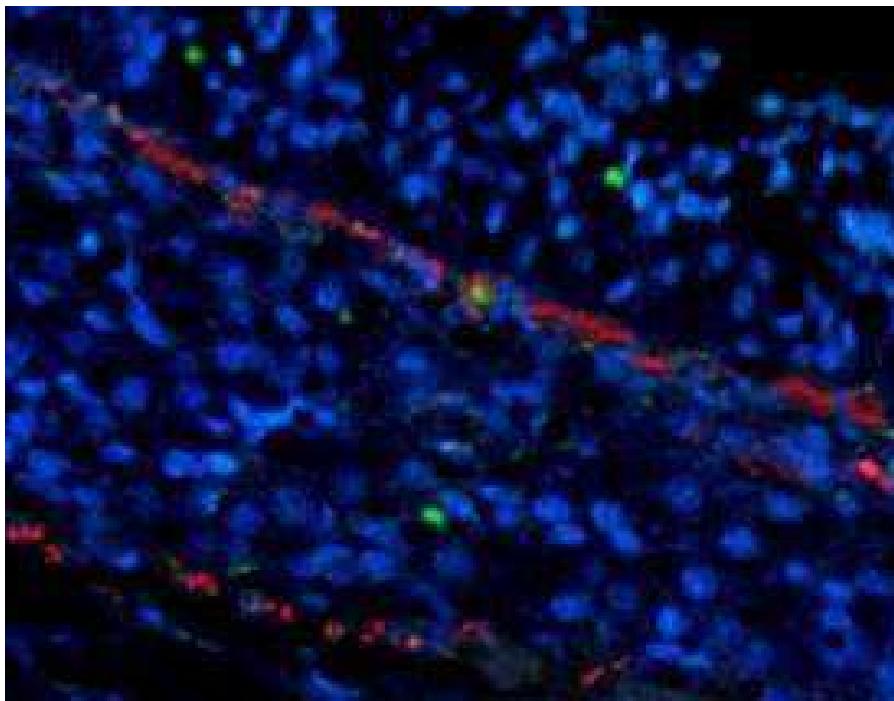
**$1.29 \pm 0.65$**

Total VA

**$2.54 \pm 0.58 *$**

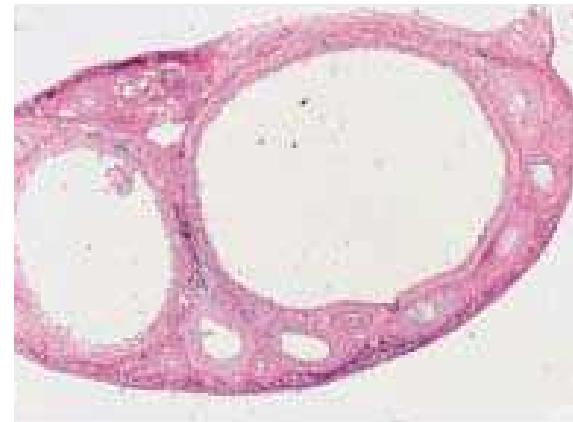
\*  $P < 0.05$

# PROLIFERATION INDEX

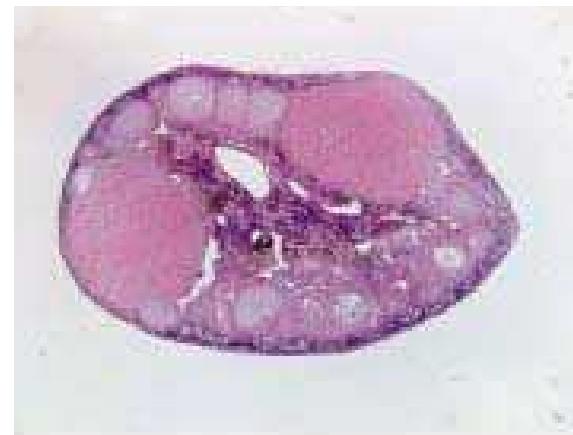


FvW  
Ki-67  
DAPI

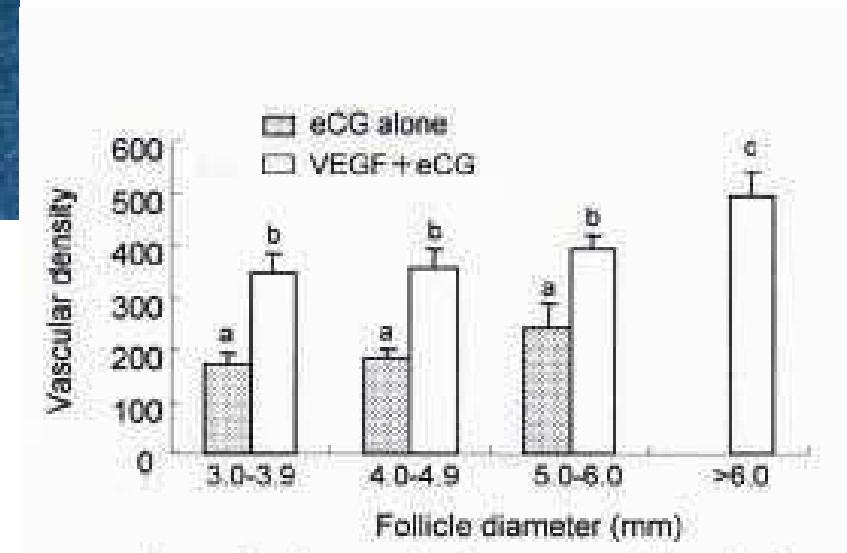
# VEGF/VEGFR inhibitors



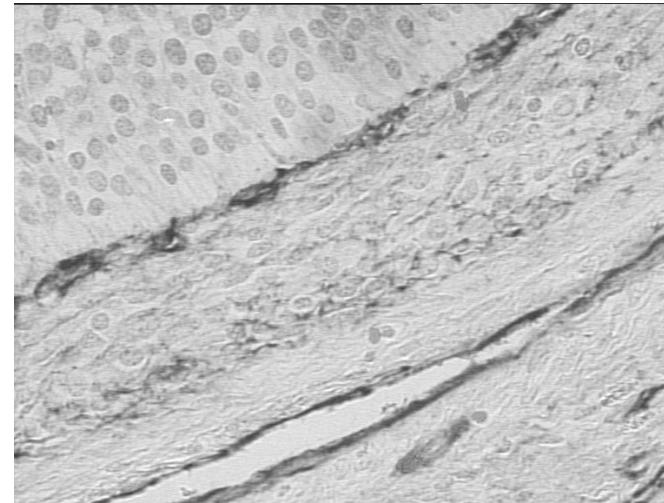
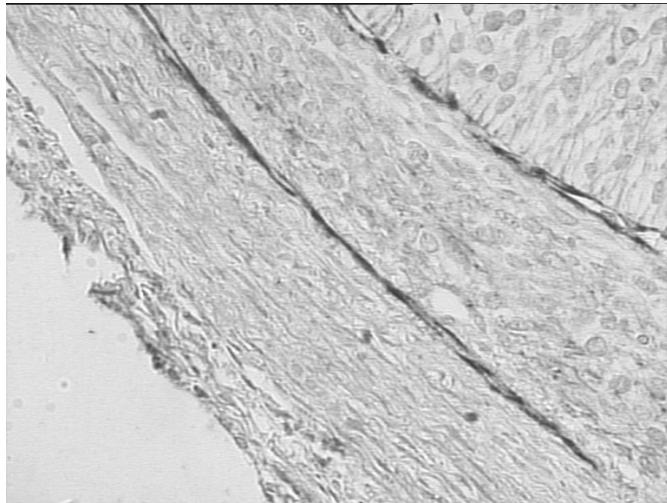
Follicular growth



# injection of VEGF gene fragments

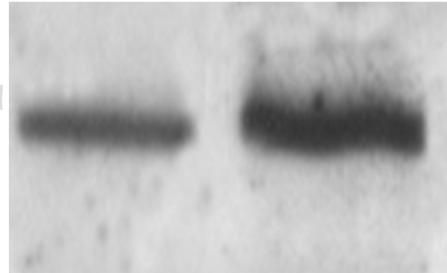


## VEGF PROTEIN: granulosa-theca layers



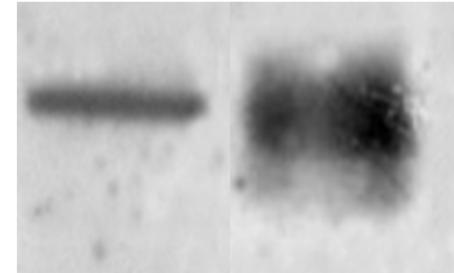
Theca   Granulosa

46Kd



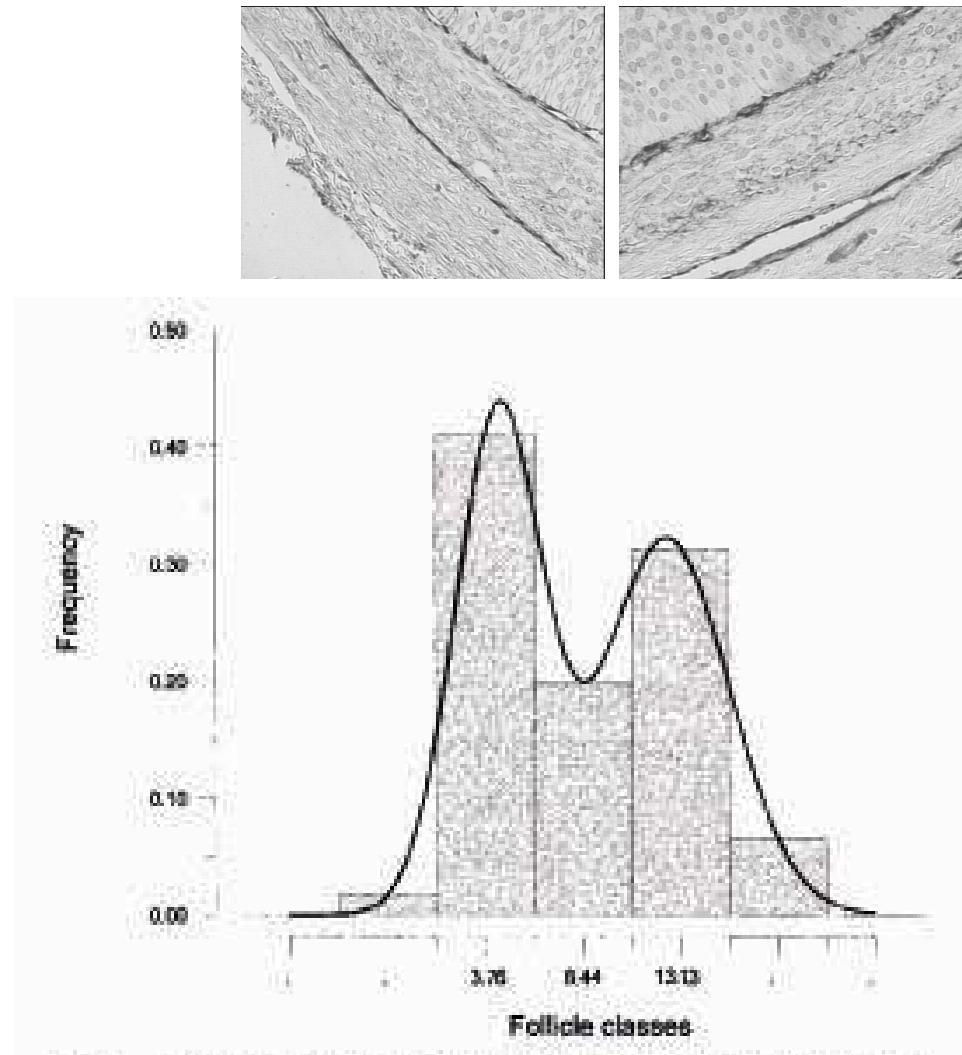
Theca   Granulosa

46Kd



WB

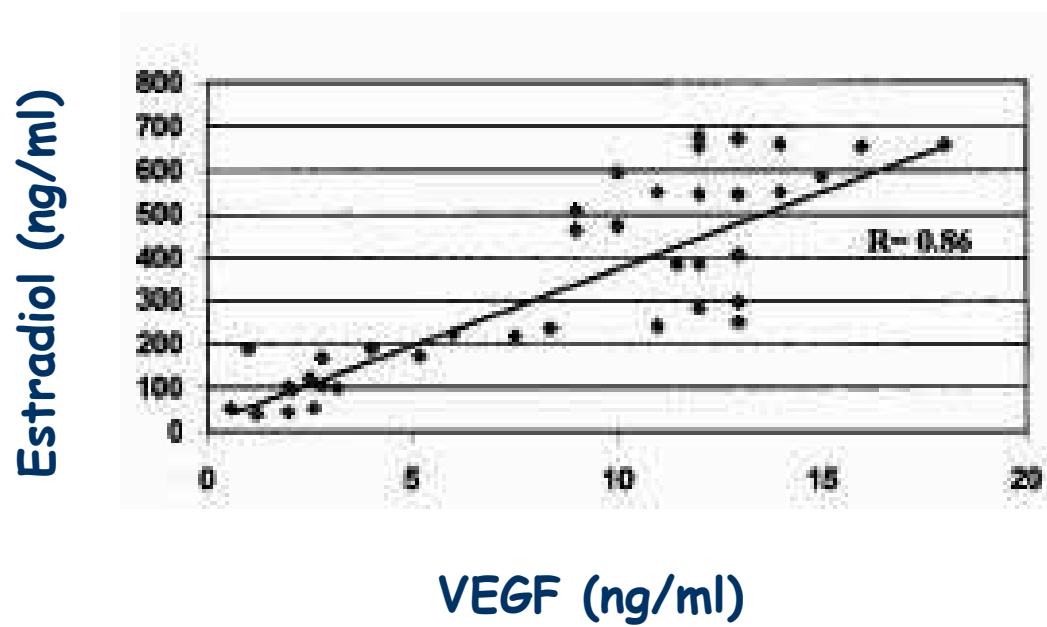
# VEGF: follicular fluid



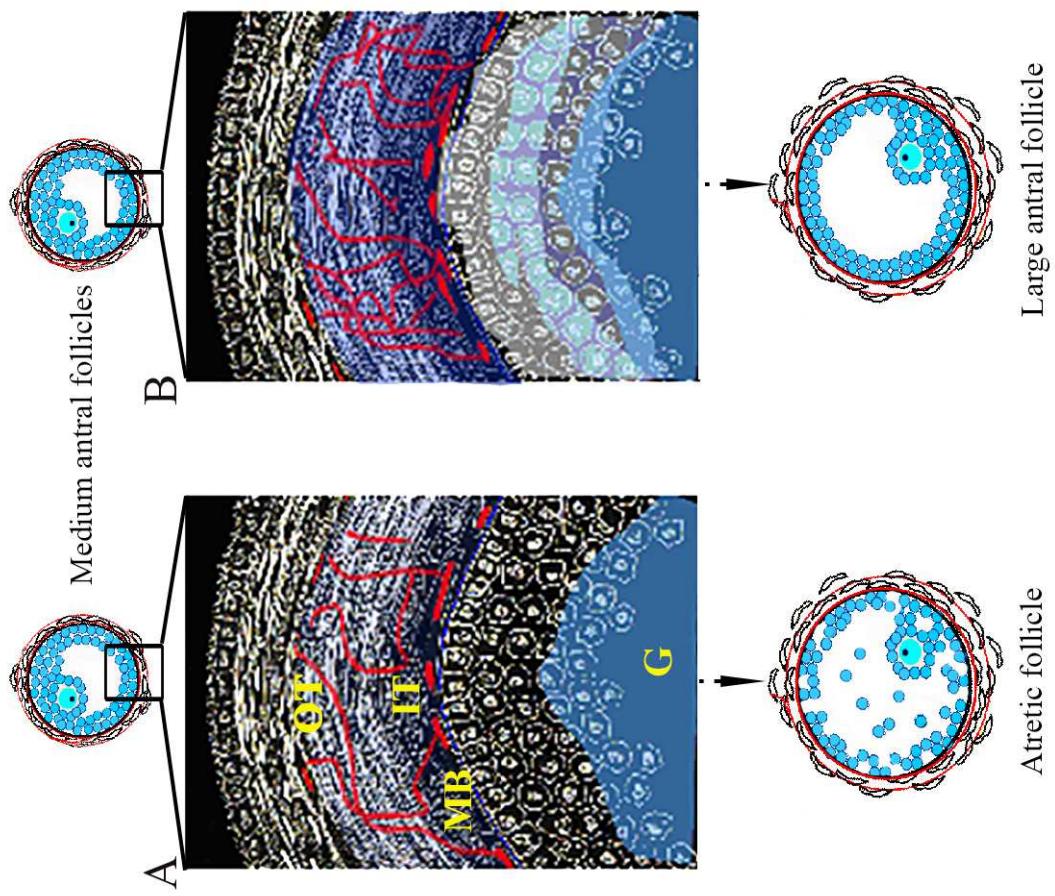
Mattioli M. et al., Biol Reprod 2001; 65:1014-9

ELISA

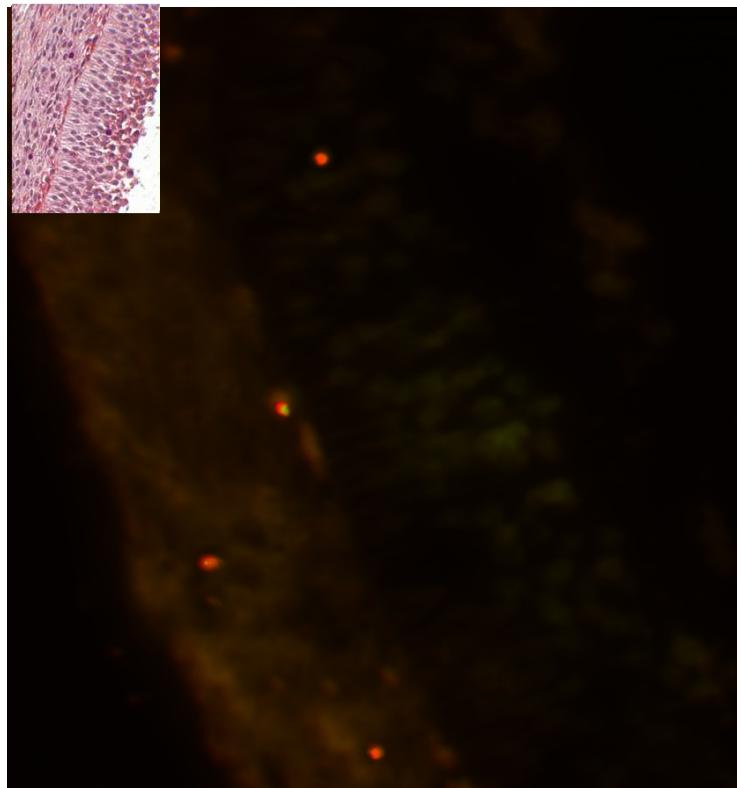
# ESTROGEN- VEGF CORRELATION



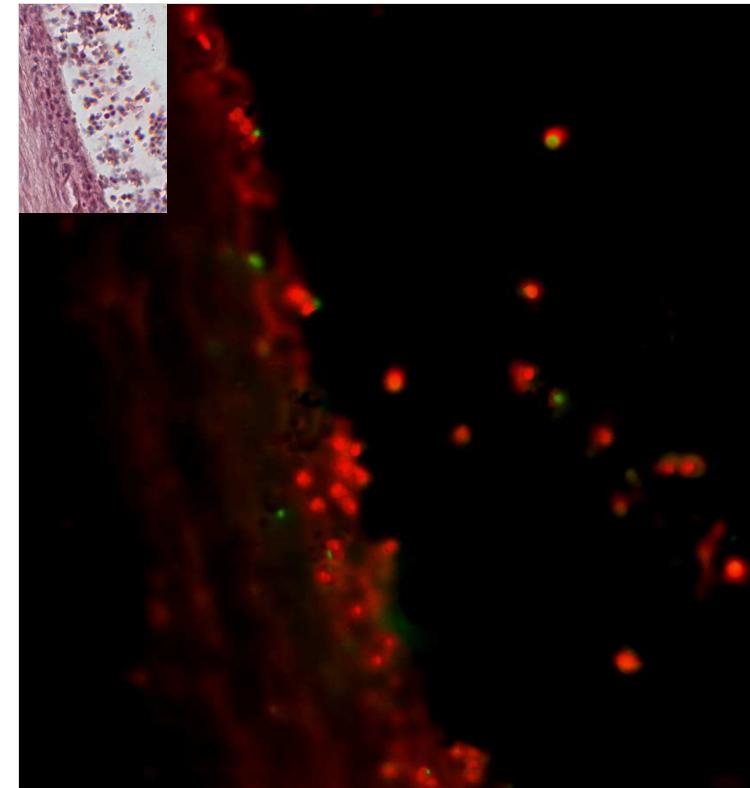
BIMODAL DISTRIBUTION OF MEDIUM ANTRAL FOLLICLES



# APOPTOSIS IN MEDIUM ANTRAL FOLLICLES



Antral Follicle



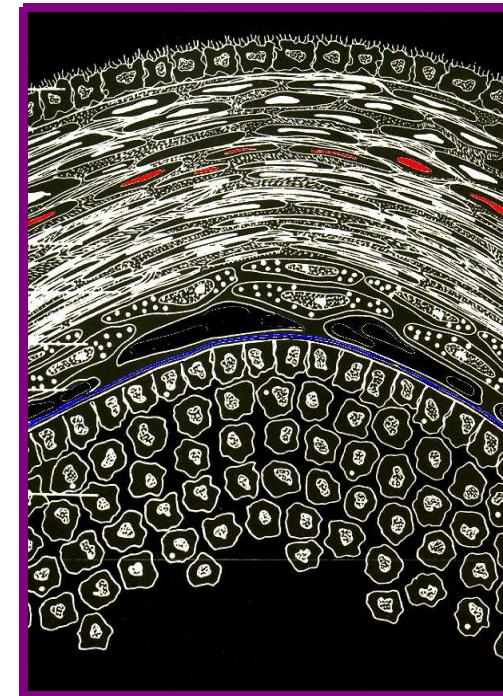
Atretic Follicle

Berardinelli P et al., *Anat Histol Embriol* 2004; 33:23-7

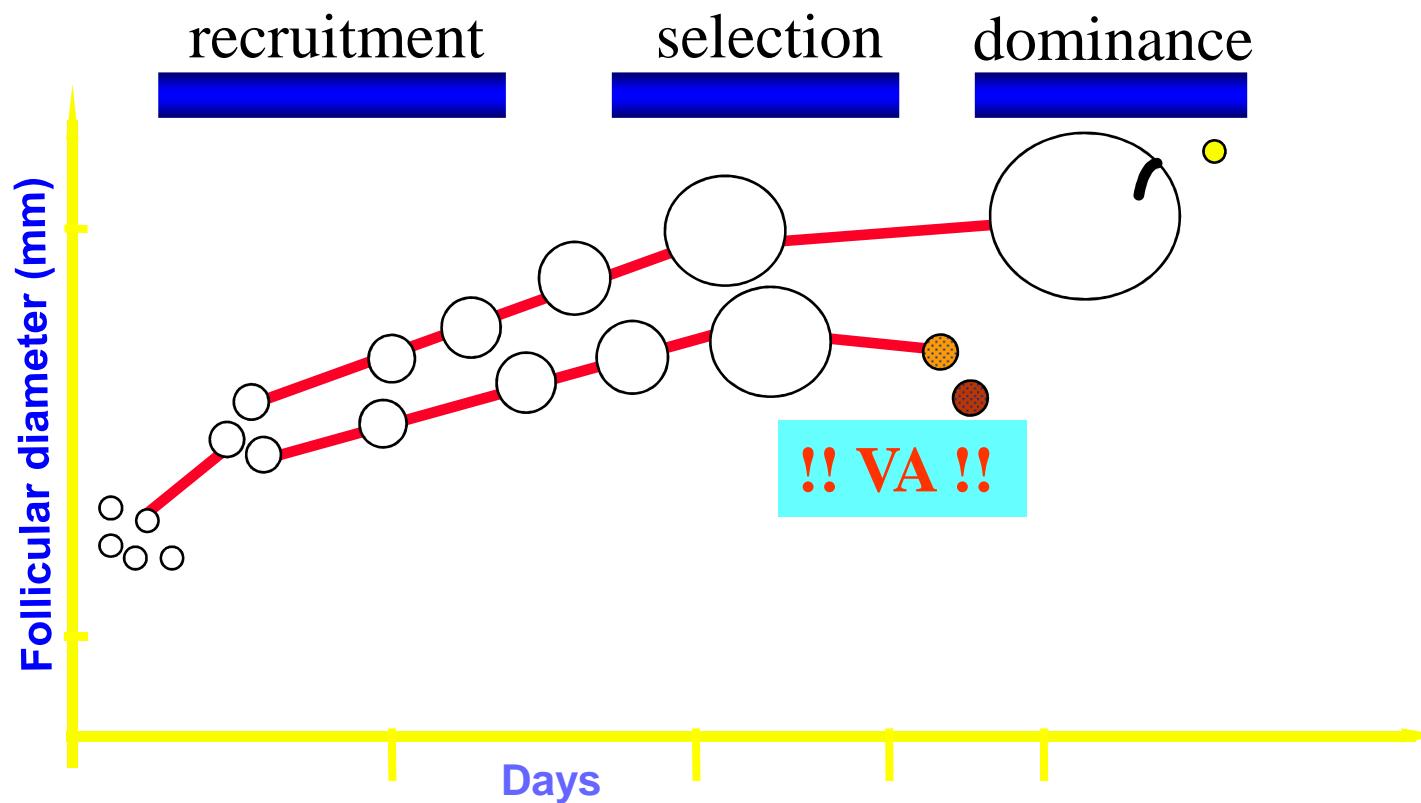
## Antral Follicle



## Atretic Follicle

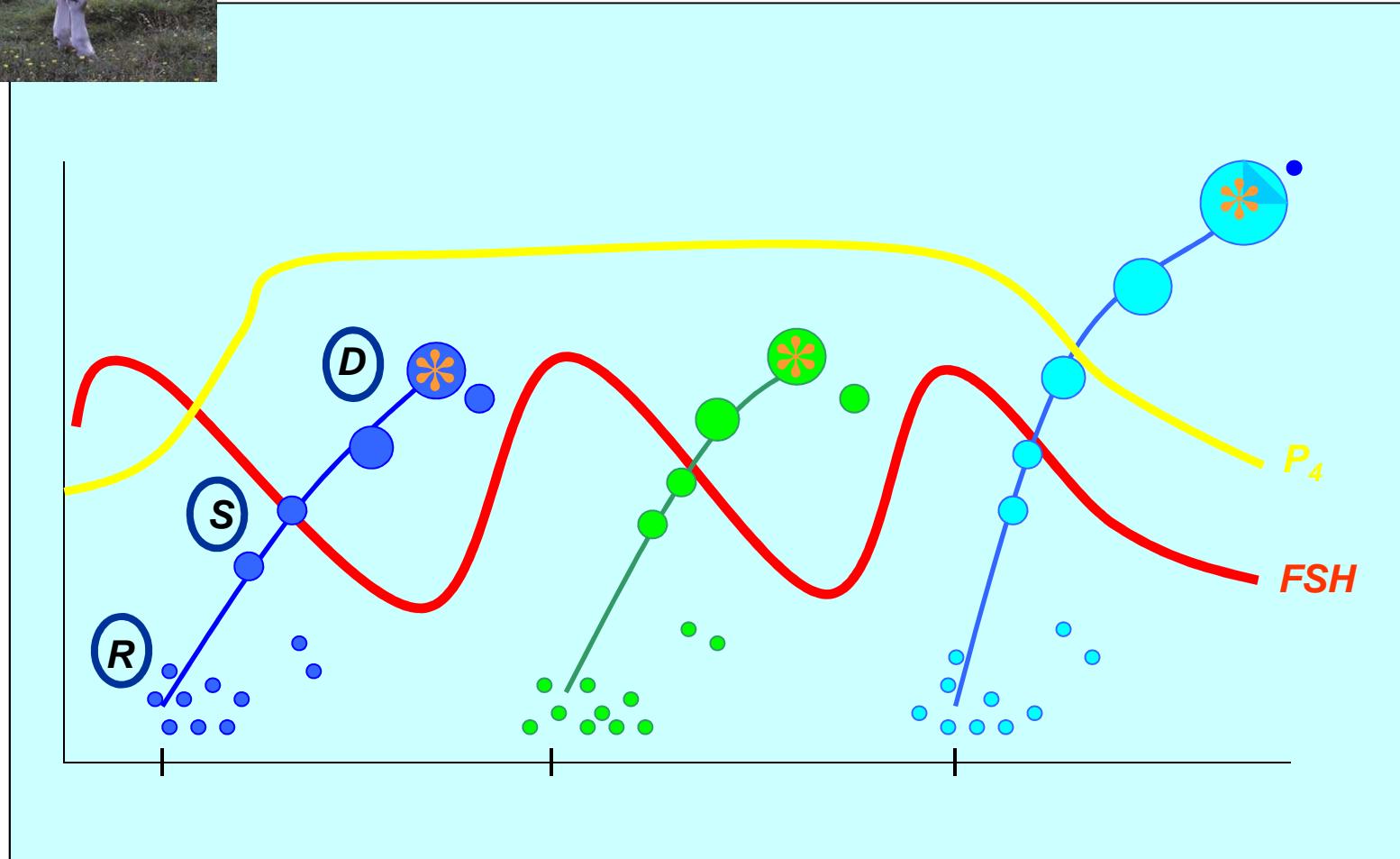


## *estrus cycle*





## estrus cycle



R= recruitment

S= selection

D= dominance

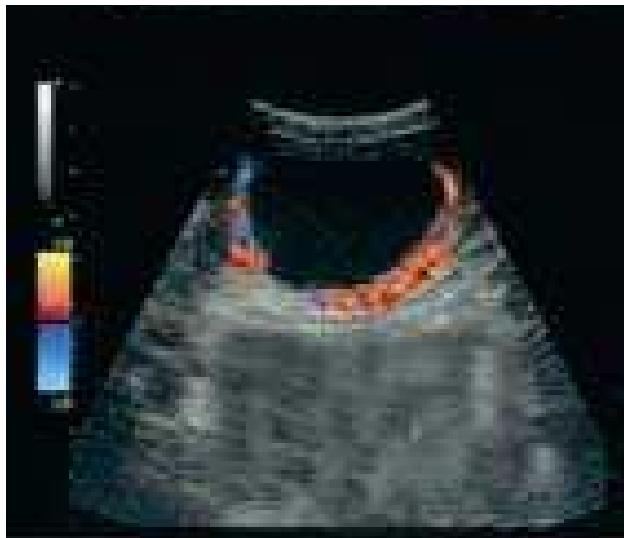
\* dominant Follicle



## transrectal ultrasonography



dominant follicle ana-  
ovulatory



dominant follicle  
ovulatory