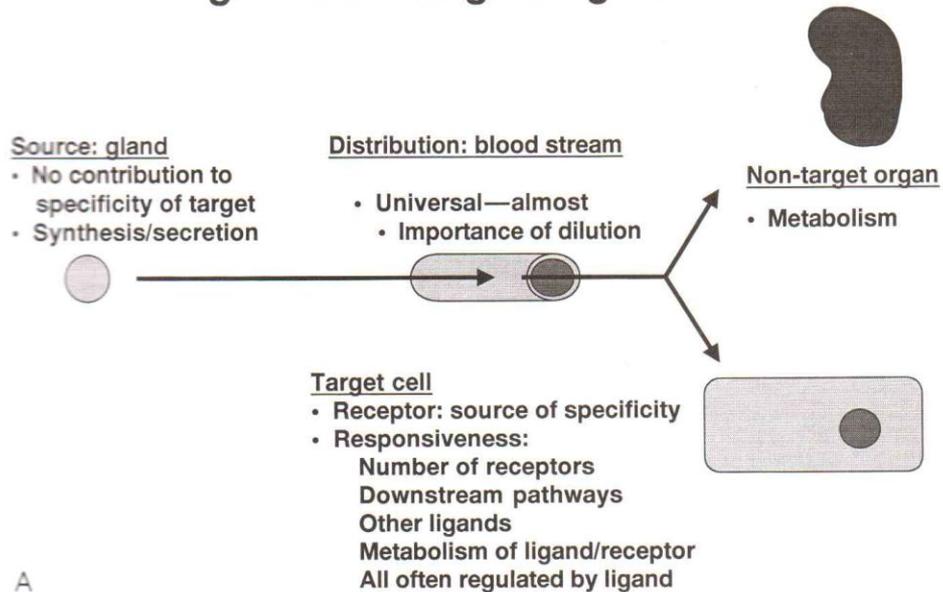
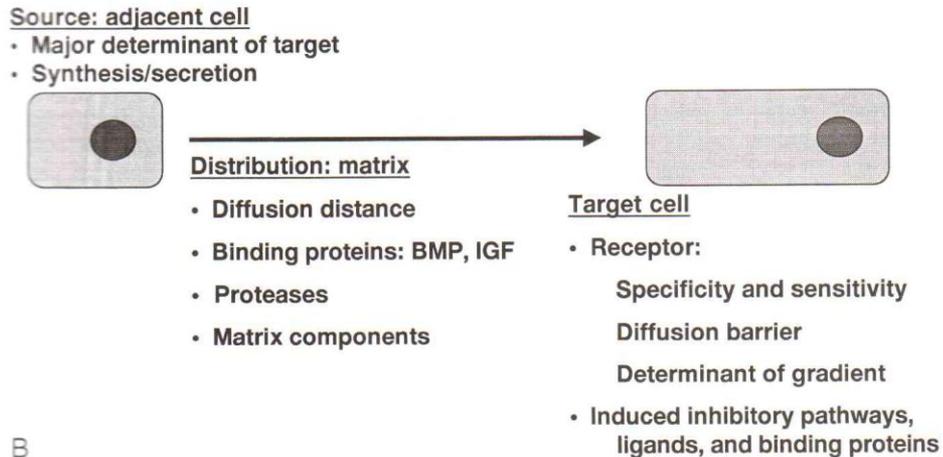


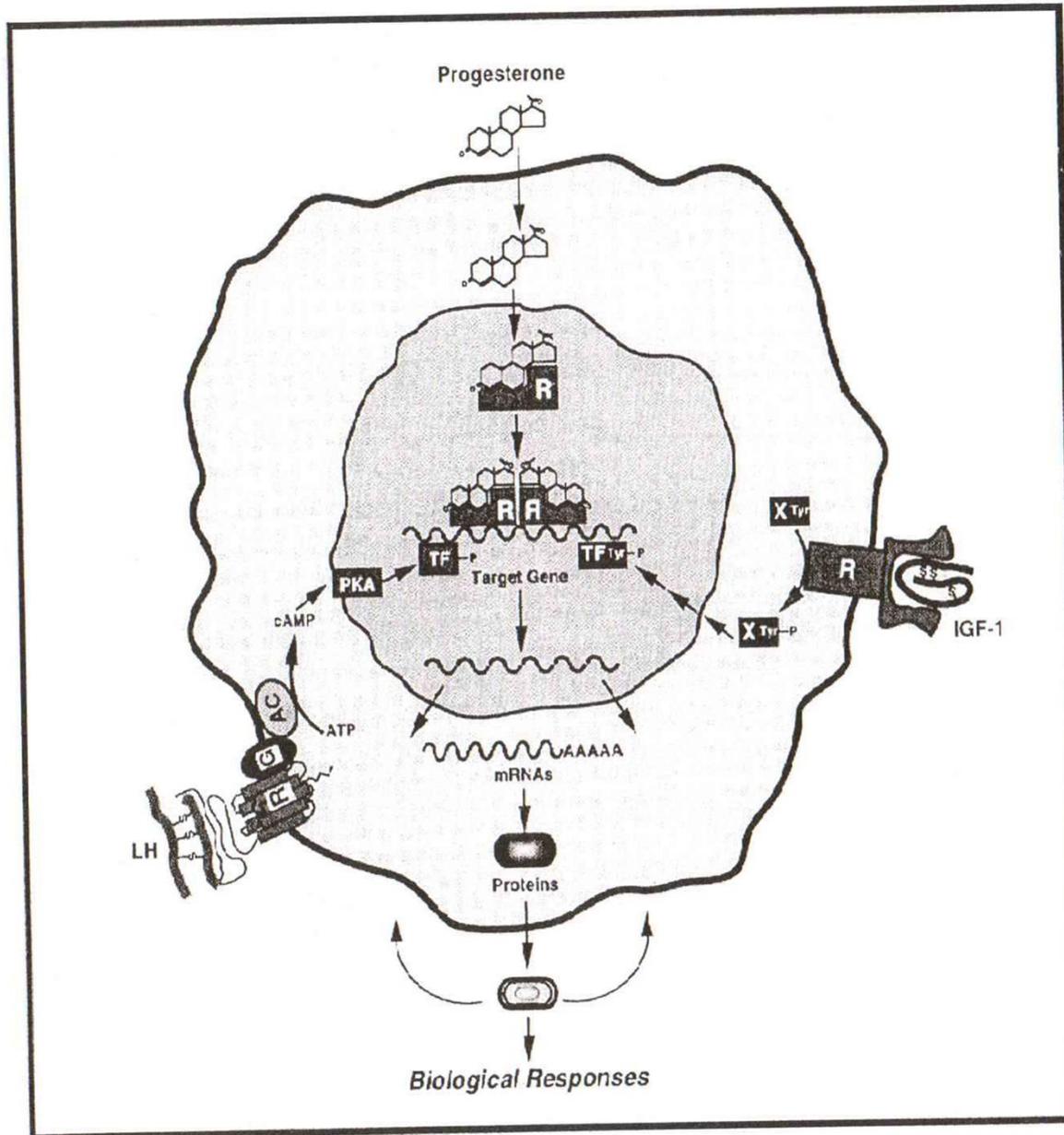
Regulation of signaling: endocrine

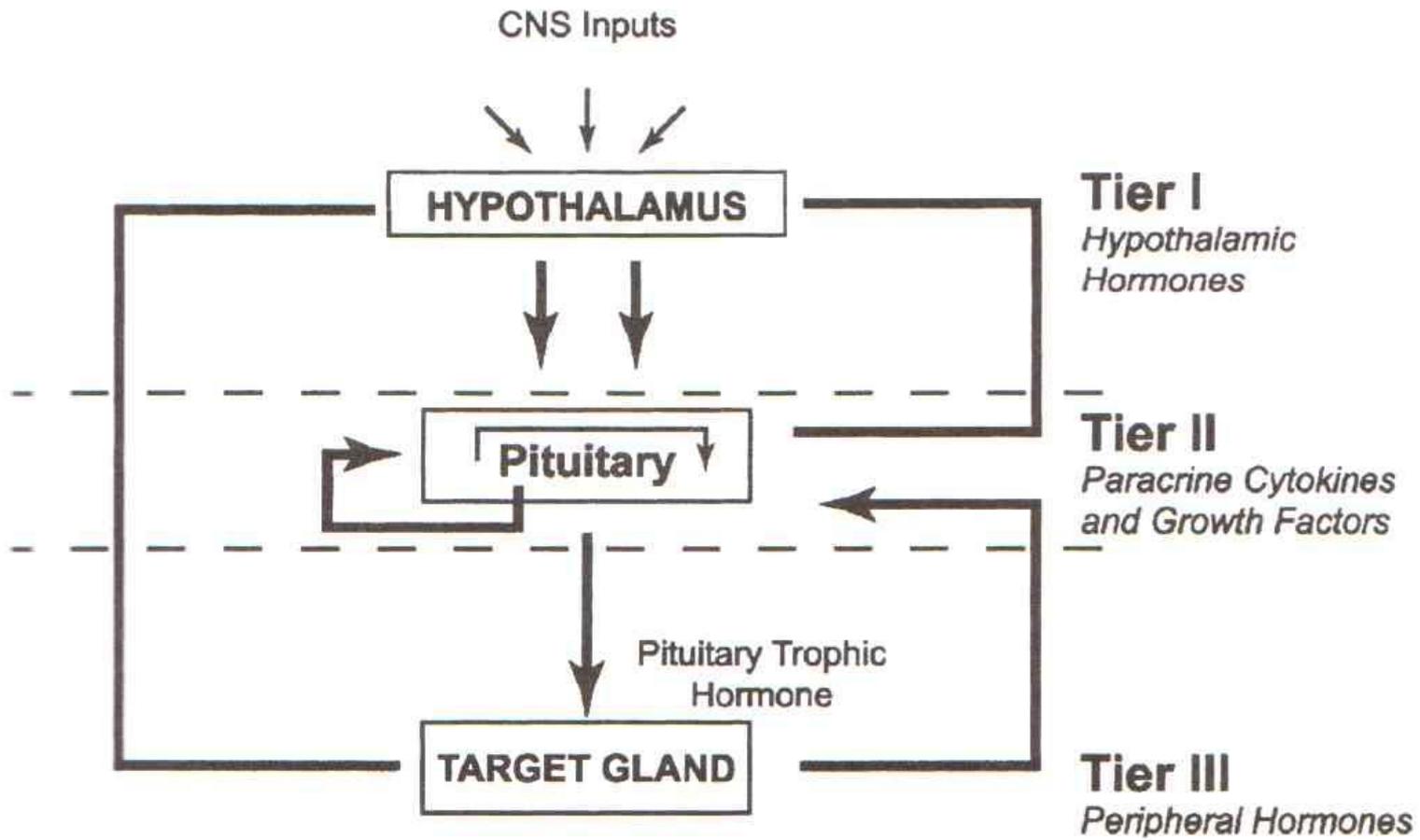


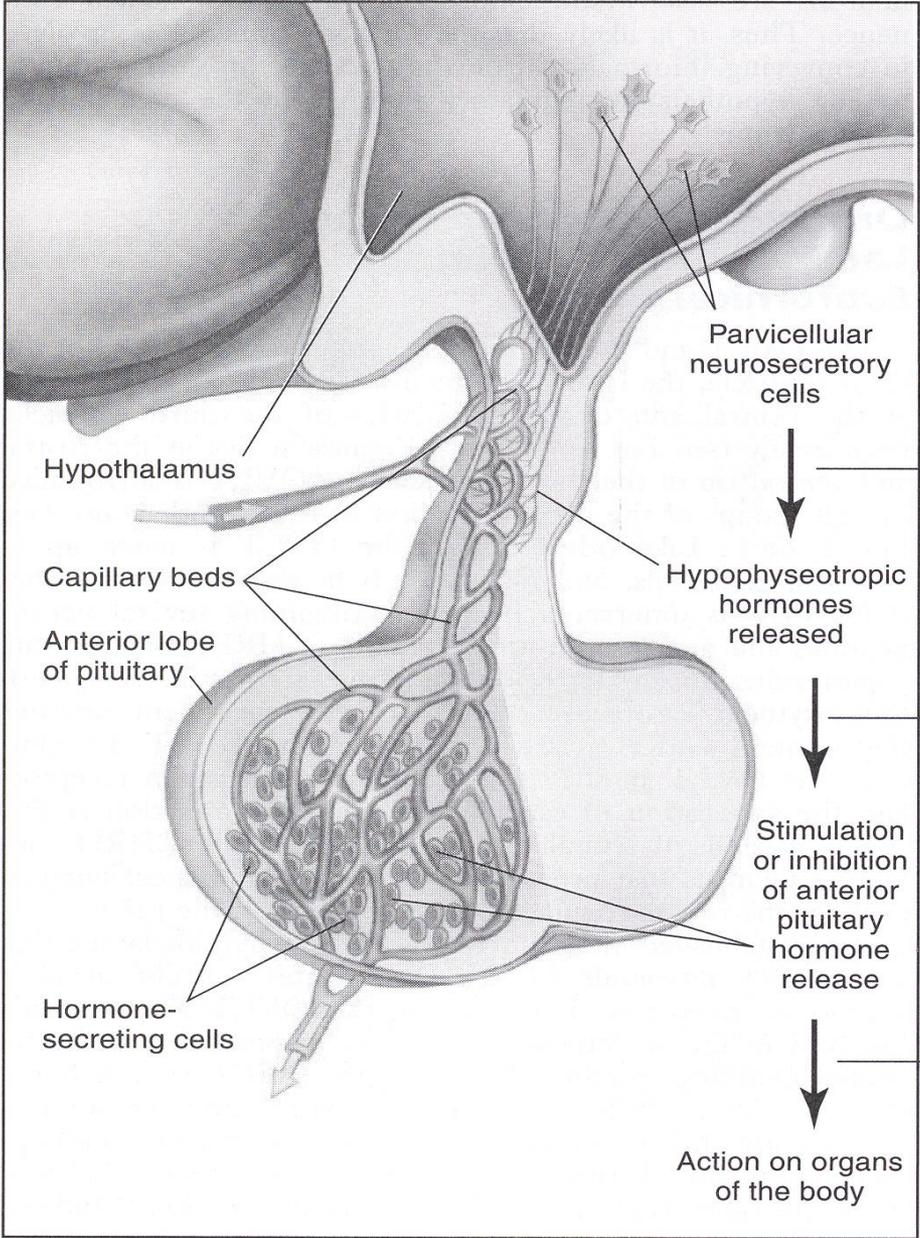
Regulation of signaling: paracrine



RECETTORI







Parvicellular neurosecretory cells

Hypothalamus

Hormone transport in axons

Capillary beds

Hypophyseotropic hormones released

Hormone transport in blood

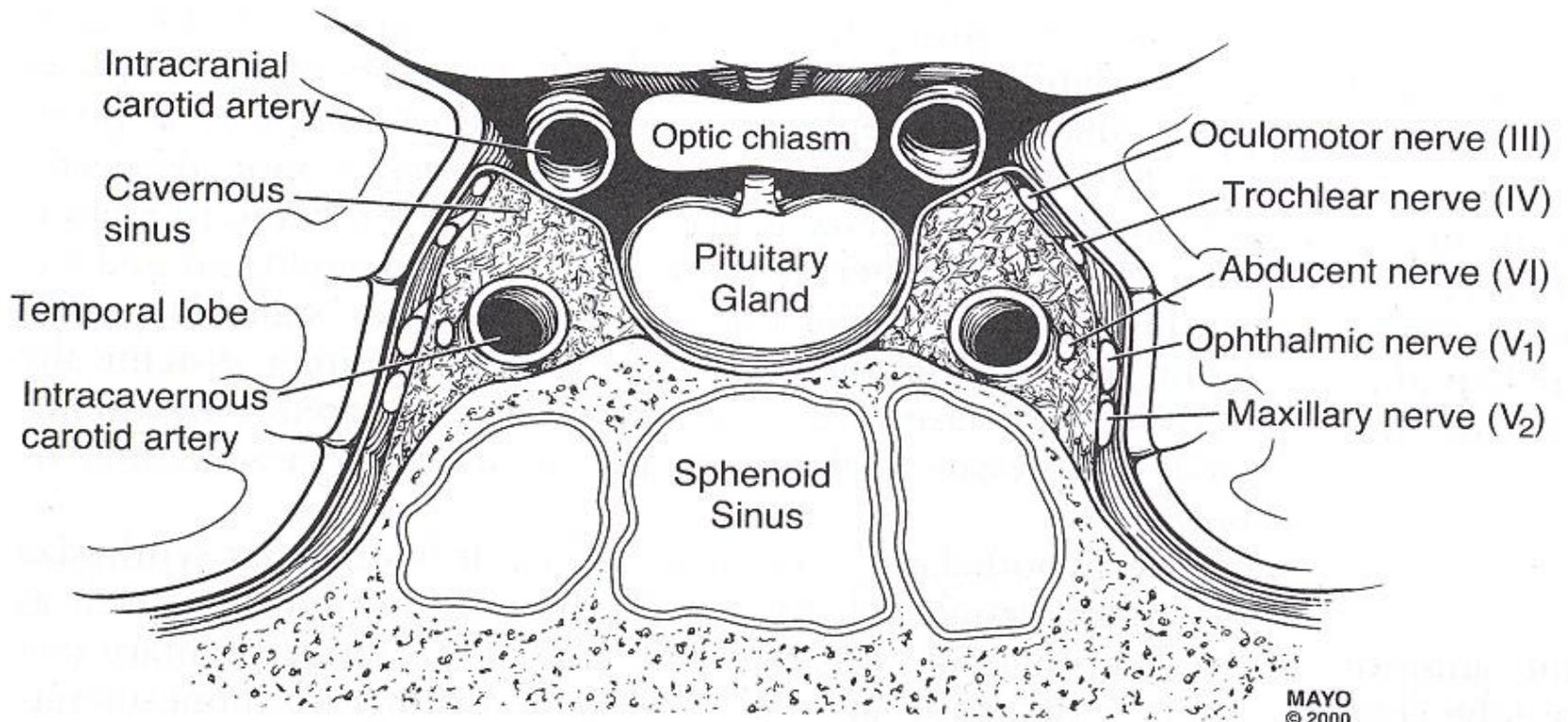
Anterior lobe of pituitary

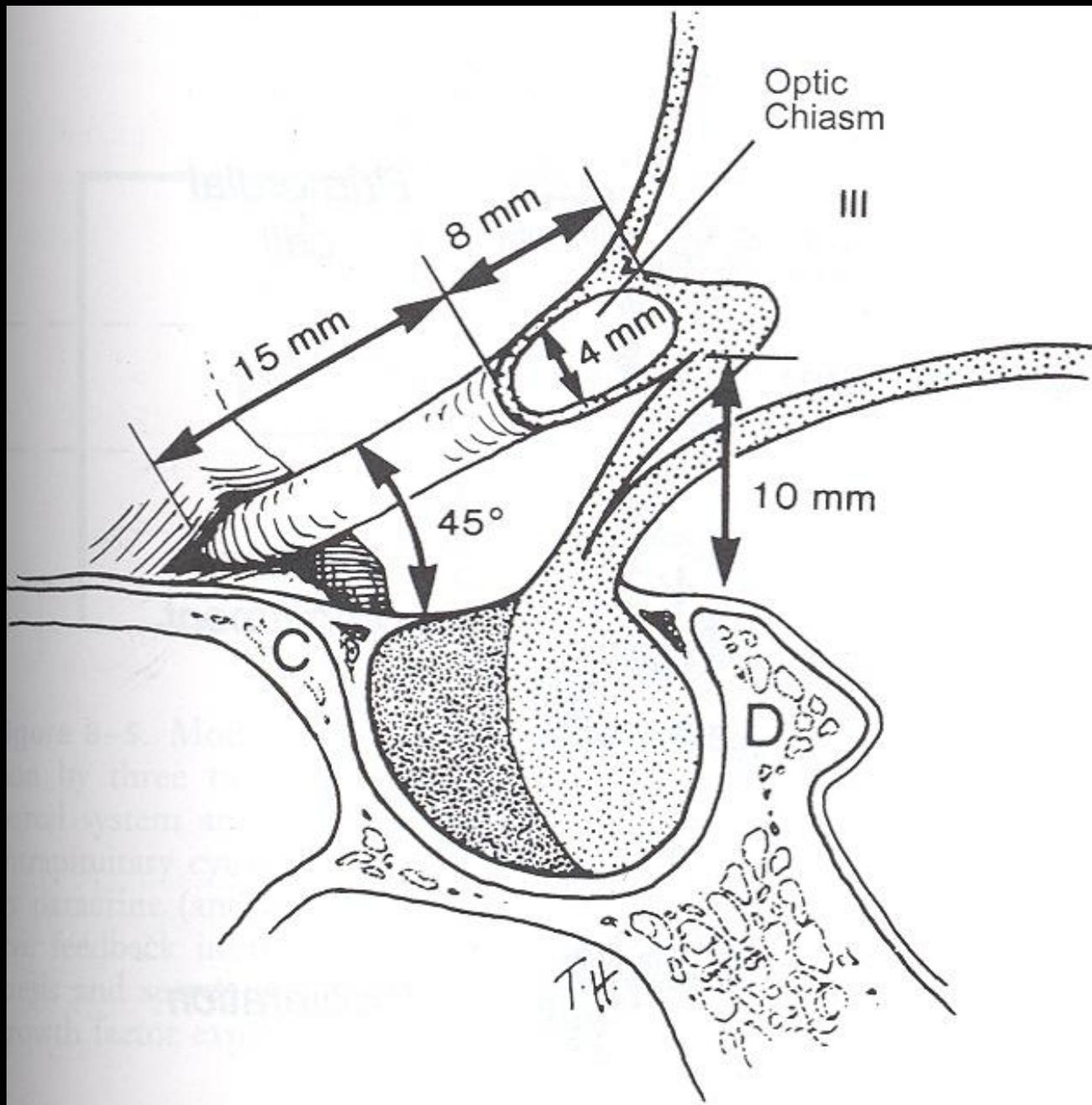
Stimulation or inhibition of anterior pituitary hormone release

Hormone-secreting cells

Hormone transport in blood

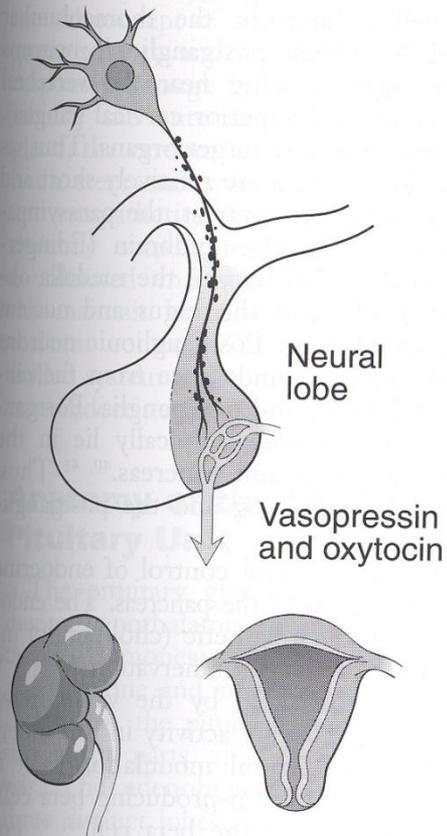
Action on organs of the body





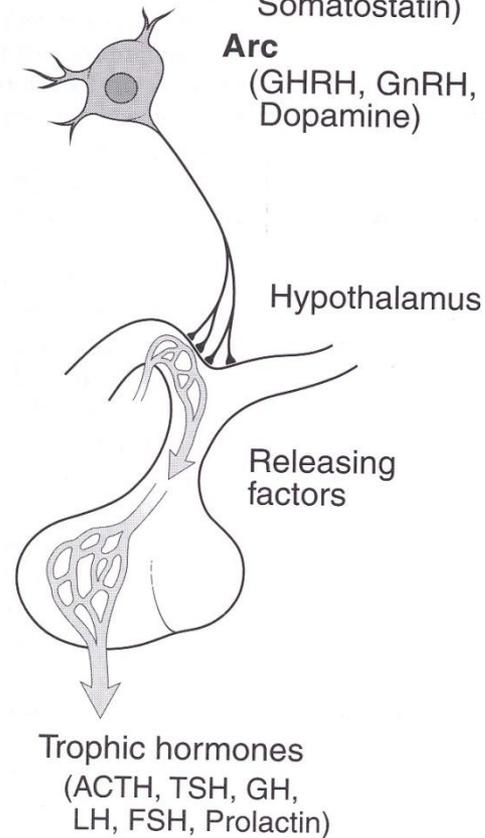
Magnocellular Neuron

Location: **SON, PVH**
(AVP, OXY)



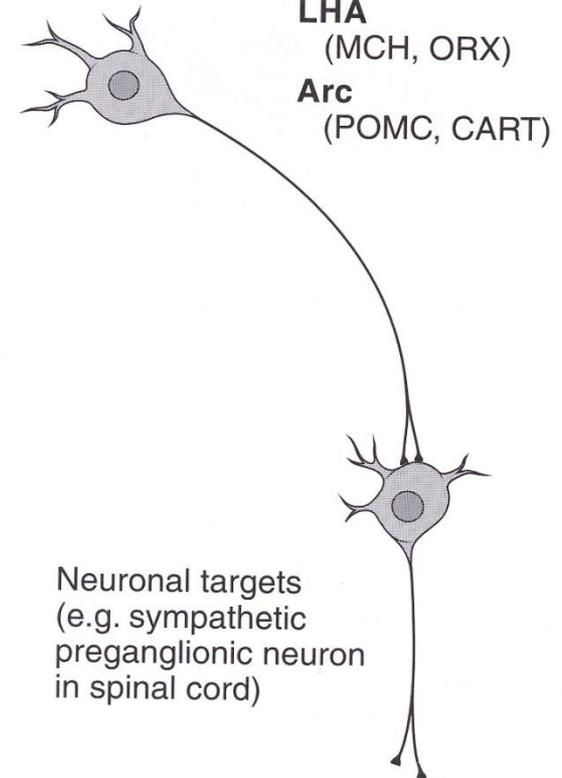
Parvocellular Hypophyseotropic Neuron

Location: **PVH**
(TRH, CRH, Somatostatin)
Arc
(GHRH, GnRH, Dopamine)

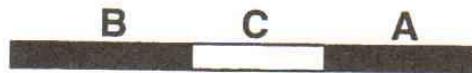


Hypothalamic Projection Neuron

Location: **PVH**
(AVP, OXY)
LHA
(MCH, ORX)
Arc
(POMC, CART)



ProINSULIN



ProSOMATOSTATIN



ProGLUCAGON



Pro-OPIOMELANOCORTIN



ProENKEPHALIN



ProPRESSOPHYSIN



ProPARATHYROID HORMONE



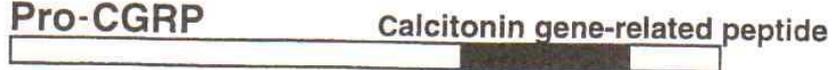
ProGASTRIN



ProCALCITONIN



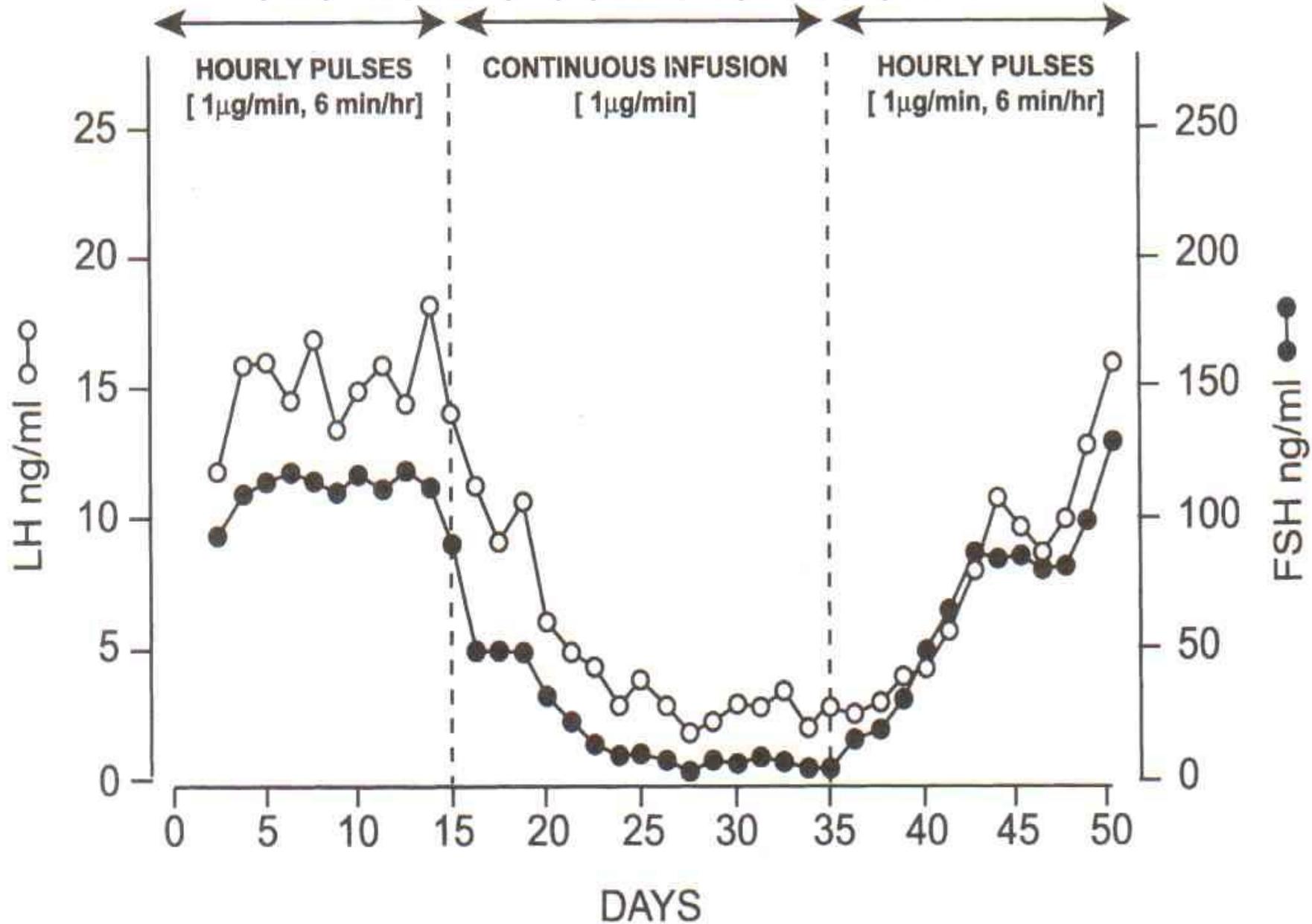
Pro-CGRP



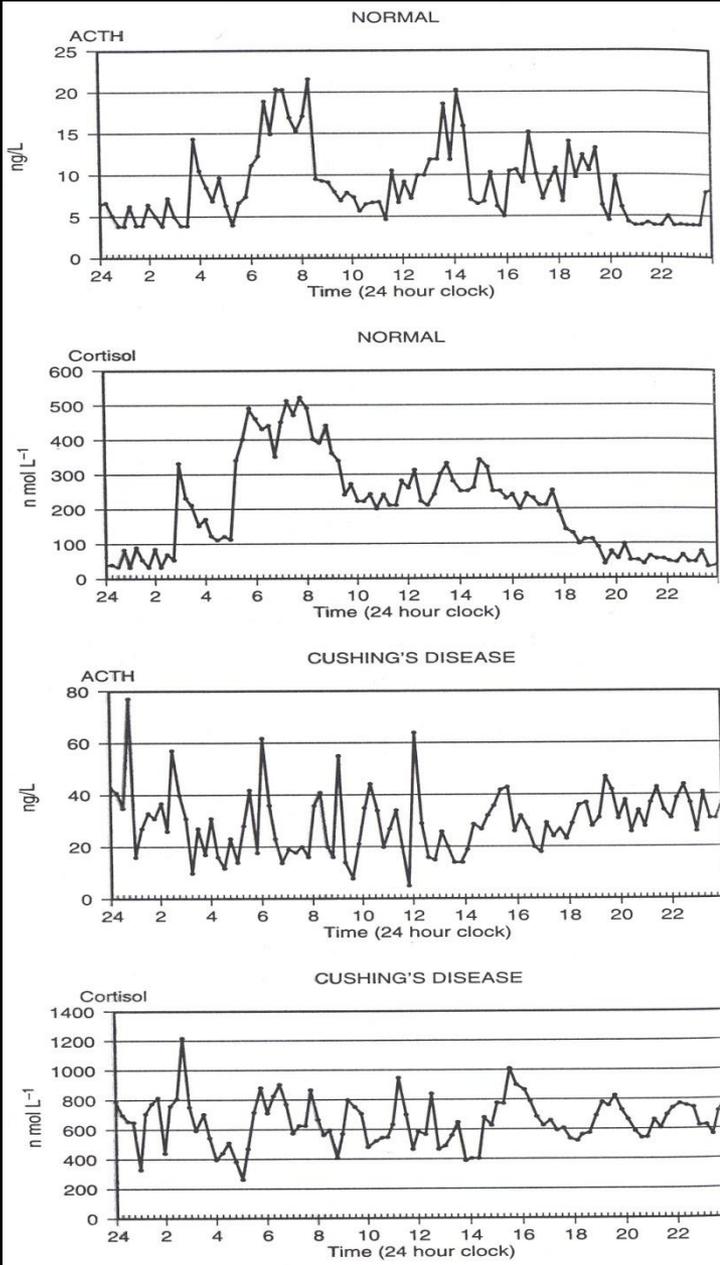
GLI ORMONI SONO SECRETI IN MODO PULSATILE - RITMICO

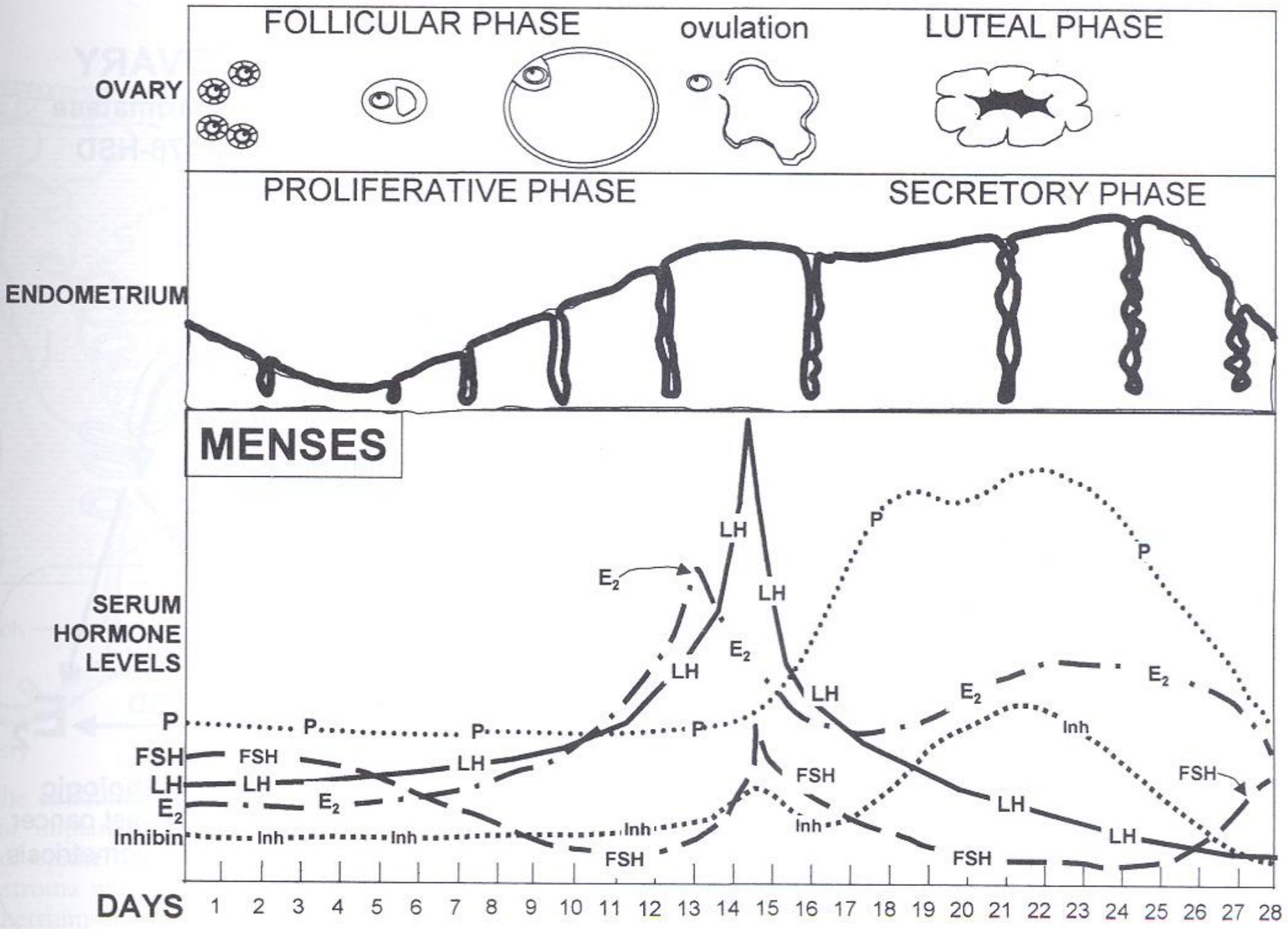
- 1. Secrezione pulsatile - millisecondi**
- 2. Ritmo circadiano - ore**
- 3. Ritmo mensile - settimane**

EFFETTI DELLA SOMMINISTRAZIONE PULSATILE O CONTINUA DI GnRH



Ritmo circadiano e secrezione pulsatile di cortisolo e ACTH in condizioni normali ed in un paziente con malattia di Cushing





MOLTI ORMONI SONO TRASPORTATI IN CIRCOLO DA PROTEINE LEGANTI

Solo la frazione libera dell'ormone è disponibile per l'interazione con il recettore e quindi ha un'azione biologica

Alcuni dosaggi di laboratorio non discriminano tra concentrazione totale e concentrazione dell'ormone libero.