



Figure 4-40. Ovulatory reflex arc of the rabbit. A crop of preovulatory follicles will persist for about one week during the breeding season. Follicular growth is supported by tonic production of GnRH and gonadotropins. If mating does not occur, follicles will undergo atresia, and a set of replacement follicles will mature. Expression of estrus coincides with increased production of follicular estradiol. In contrast to spontaneous ovulators, the positive feedback system for estradiol-induced production of GnRH is not operative. There is a cholinergic and adrenergic component of the sensory activation system of GnRH secretion.