Abstract

In this paper a mathematical model is developed based on current biological concepts of the lamprey GnRH-III involved in LH and FSH concentration. The physiologic role played by GnRH-III on gonadotropin secretion in mammalian species is controversial. Although GnRH-III is a weak GnRH agonist, early research in mammalian species suggested that GnRH-III can selectively stimulate the secretion of FSH without changing concentration of LH. Statistical analysis was carried out using power logistics, the diagnostic values of FSH, LH as well as LH/FSH ratio at different time points during GnRH test were evaluated using logistic processes.

References

Mathematical Modelling on Lamprey GnRH-III using Autoregressive Logistic Processes


Index Terms

Computer Science

Applied Mathematics

Keywords

Autoregressive Logistic processes  Luteinizing hormone  Follicle-stimulating hormone
Simulation Stochastic model