Introduction

Female infertility can have wide range of causes including ovulatory, cervical, pelvic, tubal and uterine factors. Approximately 30% of female infertility is caused by ovulation disorders which may be due to ovarian causes, or CNS pituitary, hypothalamic causes ***(Hoyer, 2002)***.

The hypothalamic-pituitary-gonadal axis is a critical part in the development and regulation of a number of the body's systems, such as the reproductive and immune systems. The pathway is often described as beginning with Gonadotropin Releasing Hormone (GnRH) secretion from parvicellular neurons in the arcuate nucleus into the median eminence ***(Tanriverdi et al., 2003)***.

Magnetic Resonance Imaging (MRI) is more sensitive than CT in detection of hypothalamicpituitary pathology, but thus far there is no report on its value in investigating endocrine dysfunction induced by radiotherapy for NPC ***(Lau et al., 2001)***.

MRI should be done for all cases of infertility with clinical and/or laboratory abnormalities indicating hypothalamic-pituitary axis involvement, indications may include neurological complaints or hormonal abnormalities such as elevated prolactin level or low estrogen and low FSH levels. In patients with elevated serum prolactin level MRI showed good correlation between the size of the detected prolactinomas and the degree of elevation of serum prolactin ***(Mary et al., 2005)***.