Introduction

Secondary amenorrhea is defined as absence of menstruation for at least three consquetive cycles in a woman who previously had a regular cycle. The incidence of the secondary amenorrhea is quite variable from 3% of general population to 100% under condition of extreme physical or emotional stress**(Baird et al, 1996).**

Secondary amenorrhea is important for several reasons; amenorrheic patients can not ovulate so they can not conceive , also amenorrhea with estrogen production can result in endometrial hyperplasia, which can increase the incidence of endometrial carcinoma **(Thorneycroft, 1994)**.

Normal function of menstrual cycle depends on a finaly controlled feed back system comprising hypothalamus, pituitary gland, ovaries ,and uterus . Any functional or anatomic defect in one of these parts can cause abnormal menstruation including secondary amenorrhea **(Rivera et al ,1999)**. The functional role of the uterus has been linked to the change in prostaglandins level in the endometrium **(Baird et al 1996)**.

There is high incidence of secondary amenorrhea after using of hormonal contraception ,mainly due to the effect of exogenous steroids on the endometrium , this effect varies from suppression of endometrial glandular growth to glandular

atrophy and stromal focal necrosis and in minority of cases the number of fibrous tissue increase **(Song et al ,1995).**

Secondary amenorrhea is managed mainly by the withdrawal mechanism using different types and doses of steroid hormones. Induction of ovulation can be used as a treatment of secondary amenorrhea (**Warren et al 1999**).

The copper intrauterine device commonly cause excessive uterine bleeding mainly by its local effect on the endometrium ,by increase of prostaglandins secretion by the endometrium (**Milne et al 2001**).

Insertion of a copper intrauterine device restors regular menstruation in women with functional secondary amenorrhea. The mechanism of action of copper IUD probably is related to the release of prostaglandins from the endometrium(**Vesce et al 2000**).