Introduction

One of the earliest discovered effects following intake of oral contraceptives was that upon glucose tolerance ***(Wynn 1966).***

Spellacy et al., (1972) found that there is no influence on oral glucose tolerance tests performed before and after 6 months treatment with mestranol and ethinyl estradiol.However, ***Wingrave et al., (1979)*** observed that traditional brands of oral contraceptives with 50ug estrogen or more and high progestational content decrease glucose tolerance and cause rise in plasma insulin levels. Despite these findings no risk of developing clinical diabetes was observed ***(Wingrave et al., 1979, Martin, 1979).***

De-pirro et al., (1981) observed that insulin binding to its receptors in women on oral contraptives does not differ from that observed in normal menstruating women in luteal phase but lower than that in the follicular phase. Differences are mainly due to reduced receptor concentrations.

Spellacy et al., (1982) compared the effects of two types of low estrogen products, one with norgestrel and the, other with norethindrone on carbohydrate metabolism. It was found that the carbohydrate changes have been seen mainly with products containing norgestrel and that ethinyl estradiol has little effect on glucose or insulin level.

Hannaford (1989), in a long term study among women who ingested high progesterone containing oral contraceptives for many years, observed that these formulations did cause peripheral insulin resistance and deterioration of glucose tolerance in a substantial proportion of users.However, the effect was temporary and did not result in increased incidence of developing diabetes even among long term users (>10 years).

The effect of combined oral contraceptives on glucose metabolism are dependent on the type of progestogen used and the estrogen progestogen ratio. The use of low-dose monophasic or triphasic compounds seems to have no effects on glucose tolerance although a hyperinsulinaemic response to oral glucose may be seen ***(Skouby et al., 1987).***

Recently efforts have been made to develop new progestogens with less influence on metabolic functions. Desogestrel and Gestodene are among those which seem most promising. In a comparative study it was found that there was no change in glucose tolerance when these progestogens were used in low dose combined with ethinyl estradiol. Although the insulin response to glucose load increased during hormonal treatment ***(Petersen et al., 1985).***

Desogestrel is a new synthetic progestagen with antiandrogenic effect, aldosterone antagonistic activity and the highest biologic progestogenic activity ***(Hoppe, 1986).*** .