

Dienogest

A Viewpoint by J. Spona

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During the past few years, different approaches have been used to decrease unwanted adverse effects with oral contraceptives. Among them are dose reduction, new dosage schemes and, most recently, the development of more specific progestogenic compounds.

The development of dienogest resulted in a progestogen with a unique pharmacological profile. The drug can be looked upon as a hybrid between the 19-nortestosterone and C-21 series of progestogens. It combines the positive pharmacological effects of both progestogen groups, while lacking the negative profile of 19-nortestosterone compounds.

It is generally thought that the estrogen component in combined oral contraceptives is primarily responsible for alterations to the haemostatic system. On the other hand, progestogens modify the effect of estrogens by their antiestrogenic and residual androgenic properties. Dienogest exerts no estrogenic, anti-estrogenic or androgenic actions

and has a pharmacological profile close to that of the natural progestogen progesterone. As a result of the drug's unique pharmacological profile, administration of the combined oral contraceptive containing dienogest 2mg plus ethinylestradiol 30µg produces a balanced effect on the haemostatic system and has no effect on carbohydrate metabolism.

The dienogest/ethinylestradiol contraceptive effectively modulates ovarian function resulting in high contraceptive efficacy. The high selectivity of dienogest for the progesterone receptor assures good cycle control with the combined oral contraceptive. In addition, the antiandrogenic activity of dienogest is favourable for its use in women with signs of androgenisation.

Existing areas where there is currently significant need for this new kind of progestogen is the management of postmenopausal syndrome and the treatment of endometriosis. For use in these indications, the progestogen should ideally be devoid of antiestrogenic and androgenic activity. Clinical studies of dienogest in these indications have been carried out and have produced promising results. ▲