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Hormonal treatment of patients with endometriosis in the postoperative phase

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Introduction

Hormonal treatment of women with endometriosis in the postoperative phase, particular those women, who desire to have pregnancies in the future, must be considered postoperatively for the best hormonal treatment approach.

Principally, there are two main concepts:

1. Combined hormonal contraceptives continuously (COC´s).
2. Progestogens-only-pills (POP´s) continuously

In recent years the available data support the conclusion that COC´s are not the ideal choice. Biological data and limited clinical evidence support a potential adverse effect of long-term use of COC´s on the progression of endometriosis.

It has been published, that 50 % of the women with endometriosis, who take COC´s, had only partial symptom improvement or no improvement was encountered [1, 2].

COC´s can even delay diagnosis of endometriosis, but the progression of the disease will not be prevented. An indicator for such non-effectiveness is a change of medication, because of various symptoms [1]. To date, the hypothesis of recommending COC´s for primary prevention of endometriosis is seemingly not sufficiently substantiated [3].

POP´s and Endometriosis

It is the goal after diagnosis of endometriosis/adenomyosis to achieve amenorrhea, which can be accomplished by POP´s. In addition, there will be a regression of the endometriotic lesions.

In the USA Dienogest as well as Norethisterone acetate have regulatory approval for treating endometriosis. In Europe only Dienogest is approved.

There are randomized, controlled trial data to support the effective use of Dienogest for dealing with endometriosis/adenomyosis successfully [1].

In an estrogen dependent disease, like endometriosis, the estrogen part of the COC´s is contraproductive. A better alternative is POP´s, who are reducing the pain symptoms, but also lead to regression of the endometriotic lesions.

Long-term studies up to 52 weeks were carried out including a recent study on adolescents [4, 5].

Overall, Visanne® does not endanger bone structure even in adolescence [5].

Dienogest (Visanne®) has many favorable effects such as endometrium reduction of proliferation, aromatase expression, angiogenesis and increased apoptosis, improvement of progesterone resistance and anticancer potential.

There is a significant reduction of pain, which is further improving over time [6,7]. Dienogest 2mg/d is as effective as GnRH-agonist therapy and add-back [9].

Also the bleeding pattern over time improves [8]. There is no negative effect on bone density [6], in addition there is reduction in nerve fiber density in the endometrium [10].

The long-term progestogen treatment of endometriotic lesions appears to reduce the development of type I ovarian cancer [11, 12].

In addition, there is no risk of thrombotic events using progestogens like Visanne® [13].

Conclusion

The goal of hormonal treatment after operation for endometriosis is:

1. Control of symptoms
2. Women with the diagnosis of endometriosis and future desire to have children should be particularly cared for.
3. Prevention of endometriosis progression
4. Prevention of new development of endometriosis and progression of adhesions.
5. Favorable effect on body, social and mental wellbeing.
6. Intended goal after diagnosis and operation of endometriosis/adenomyosis is amenorrhea. This is in particular of value in women with future desire to become pregnant.

Consequences for the future

Women operated for endometriosis/adenomyosis and further desire to have children, a continuous treatment with progestogens should be done until conception is desired.

Positive aspects

1. Improvement of quality of life

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2. Control of endometriotic lesions and prevention of development of new endometriosis.
3. Control of adhesions
4. No thrombotic risk
5. Possible favorable effect on all benign, estrogen-dependent lesions in women (endometriosis, adenomyosis, myoma, benign breast lesions)
6. Reduction of oncological risk (endometrial cancer, ovarian cancer, breast cancer, colon cancer)

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