# CORRESPONDENCE

# Medical Eligibility for Contraception in Women at Increased Risk

by Prof. Dr. med. Thomas Römer in issue 45/2019

# **Natural Family Planning**

It is extremely unfortunate that an article (1) aimed at general continuing medical education about the topic of contraceptive options in women at increased risk does not address an important alternative, except in a list in a diagram: natural family planning (2).

In particular with the symptothermal method according to Sensiplan, it is possible to use natural family planning (NFP) in Germany, as it has been carefully supervised and evaluated scientifically for decades and has a method reliability that is in the high safety range, comparable to common hormonal contraception methods (3, 4). Especially for women at risk, NFP according to Sensiplan is a very attractive alternative, as it has no side effects. It should therefore be mentioned as a further option in every counseling consultation.

Every physician who provides contraceptive advice should be aware of this alternative and be able to present its advantages and disadvantages to patients in a well-founded and up-to-date scientific manner. It would be equally important for them to be able to clearly distinguish the natural Sensiplan method, which is also recommended according to the guidelines of the German Society for Gynecology and Obstetrics (DGGG, Deutsche Gesellschaft für Gynäkologie und Geburtshilfe), from other, unsuitable or unsafe methods. The so-called "cycle apps" should be specifically mentioned here, as they are currently very popular yet are highly unreliable, comparable to earlier calculation methods such as "Knaus-Ogino". Further information can be found at www.sektion-natuerlichefertilitaet.de and www.nfp-online.de (in German only). DOI: 10.3238/arztebl.2020.0251a

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#### Conflict of interest statement

Mrs. Wiesner works as a freelance consultant for NFP according to Sensiplan and receives fees from the participants of her courses. She has received reimbursement of conference fees and travel expenses from the Archdiocese of Munich-Freising, and honoraria for lectures from the Dioceses of Augsburg and Regensburg and the Archdiocese of Bamberg.

# **Contraception After Bariatric Surgery**

With regard to obesity, the problem of contraception after bariatric surgery should definitely be addressed. The most commonly used procedures in Germany are sleeve gastrectomy and proximal gastric bypass. The latter is a malabsorptive procedure that affects the absorption of oral contraceptives. A planned conception is only recommended at 12–18 months after such an operation, to avoid risks for the child (1).

Sparse data exist in the literature on the pharmacokinetics of oral contraceptives postoperatively. Limited experience postulates failure of low-dose progestinonly mini-pills. Etonogestrel implants appear to be effective and safe after proximal bypass surgery. A consensus statement recommends a preoperative consultation about oral contraception, and postoperative avoidance of them. Copper-containing intrauterine devices and progestin implants are recommended (1).

In diabetes mellitus, the low-dose pill (e.g., less than  $35 \mu g$  ethinyl estradiol) is preferable; I miss a clear statement about this in the present article by Römer (2). Here, the risk of macrovascular damage or arterial thromboembolic events is especially increased in diabetes mellitus. I would like to mention a large-scale study of around 150 000 women with diabetes, which reports a higher risk of arterial thrombosis than of venous thrombosis. The risk for the transdermal contraceptive patch and vaginal ring was increased. The use of oral progestin-only pills and of injection of depot progestins is associated with a four-fold increased risk of arterial thrombosis (3).

The review (2) by Römer briefly mentions the topic of hyperlipidemia. A systematic review by the World Health Organization in collaboration with the United States Center for Disease Control and Prevention suggests that women with known hypercholesterolemia using oral contraception have a 25-fold increased risk of myocardial infarction, while the risk of venous thromboembolism or cerebrovascular accidents is minimally increased (4).

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# Conflict of interest statement

The author declares that no conflict of interest exists.

# In Reply:

The article (1) is not an overview of various contraceptive methods (which are therefore not discussed in detail) but rather of contraception in situations of increased risk (1). Here, all non-hormonal methods, such as natural family planning, barrier methods, and non-hormonal intrauterine forms of contraception can be used almost without restriction and are therefore always an alternative that should be included in the education (cf. Figure in [1]). However, oral contraceptives predominate in frequency of use. The most common question is whether hormonal contraception is possible in patients who are at increased risk.

We were only able to present a few selected at-risk situations. A more comprehensive overview is presented in our textbook (2).

The issue of contraception in obesity has been comprehensively described. It is clear that, due to the increased associated risk of thrombosis, the trend is reverting to using non-hormonal contraceptive methods, whereby intrauterine methods are primarily recommended, especially for higher levels of obesity (BMI >35).

Contraception after bariatric surgery affects only a relatively small number of patients, but both preand postoperative counseling should take place, as the WHO recommends safe contraception for these patients for at least 12–18 months postoperatively (3).

However, very limited data are available on the pharmacokinetics of oral contraceptives in this particular situation (3). As this also includes progestogens, oral progestin-only mini-pills are not a real alternative for this. Injection of depot progestins make more sense, with the exception of depot MPA, which is associated with an increased risk of thrombosis.

The reference to low-dose pills (less than 35  $\mu$ g) is correct but plays a rather minor role in practice, as pills with 20  $\mu$ g or 30  $\mu$ g ethinyl estradiol are almost exclusively prescribed in Germany. Favorable data regarding the risk of thrombosis are available for estradiolcontaining combined oral contraceptives (COCs) (comparable to levonorgestrel [LNG]/ethinyl estradiol [EE] COCs). It is not clear why oral progestin-only preparations should be associated with an increased risk of thrombosis.

Hyperlipidemia is often associated with other risk factors and should be carefully considered. It is important to differentiate what type of dyslipidemia is present. In hypercholesterolemia, depending on the values and other risk factors (WHO category 2), alternatives such as progestin-only mini-pills are preferable. If COCs are prescribed, micro-pills with progestins (dienogest, levonorgestrel) are preferred, as these have less influence on lipids. In familial hypertriglyceridemia, COCs can be used in exceptional cases. This also depends on the dose of ethinyl estradiol as well as on the selected progestins (4). Ethinyl estradiol at the lowest possible doses, or even an estradiol preparation with a relatively lipid-neutral progestin, are preferable.

There are numerous other at-risk situations in which the choice of contraception is particularly challenging. Data on interactions between COCs and other medicinal products are often insufficient. There are many factors to consider when choosing a safe and low-risk contraceptive method, which ideally need to be clarified in an interdisciplinary dialogue.

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#### Conflict of interest statement

Prof. Römer has served as a paid consultant for Bayer and Gedeon-Richter. He has received reimbursement of congress participation fees from Bayer, travel and accommodation expenses from Aristo Pharma, Exelitis, Dr. Kade, and Hexal, and lecture fees from Bayer, Exeltis, Hexal AG, and Aristo Pharma.