How important is it to know about endometriosis during pregnancy?

In past years, pregnancy was considered to be a therapeutic period of relief of painful symptoms for women with endometriosis, but recently several papers showed that endometriosis could negatively affect pregnancy in terms of an increased risk of obstetrical and neonatal complications (1).

The article by Farella et al., “Pregnancy outcomes in women with history of surgery for endometriosis” (2), underscores in a large series the relationship between past history of surgery for endometriosis and adverse obstetrical outcomes, particularly with the risk of small for gestational age babies (SGA) and preterm birth (PTB). PTB is a major cause of perinatal morbidity and mortality, and the early recognition of pregnancies at risk could play a key role in prevention and follow-up of women, leading to a reduction in the rate of PTB and the direct costs associated with prematurity. Furthermore, recent studies showed that PTB could be a risk factor for developing endometriosis later in life (3).

In addition, in women with endometriosis, the use of assisted reproductive technologies (ART) to achieve pregnancy could represent a per se a risk factor for adverse obstetrical outcomes compared with pregnancy achieved spontaneously. This concept is strongly emphasized in this report by Farella et al., with the rate of PTB of singleton pregnancies obtained with the use of ART being higher that in spontaneous singleton pregnancies. In the same way, the increased risk of SGA in women with endometriosis could represent an increased risk of health problems in later life, such as persistent short stature, neurocognitive dysfunction, impaired renal and pulmonary function, decreased bone density, sensorineural hearing loss, premature adrenarche, and metabolic syndrome affecting not only the management of the obstetrician, but also that of the pediatrician.

There is no consensus in the literature concerning the surgical removal of endometriotic lesions before pregnancy as preventive factors for obstetrical complications. In this large series, Farella et al. confirmed that women with previous surgery for endometriosis are at risk of obstetrical complications despite complete healing of endometriosis lesions before pregnancy. Both the presence of endometriosis during pregnancy and previous surgery for endometriosis are risk factors for pregnancy complications, confirming the idea that endometriosis is a chronic benign condition and that the most aggressive or radical surgical approach (and related complications) is not always acceptable for the patient as it does not remove the risk of pregnancy complications. We need to be less aggressive with a benign disease and to individualize the timing of endometriosis surgical treatment for each patient (4).

Another interesting point, which was not assessed in the report by Farella et al., is the possible concomitant presence of adenomyosis and endometriosis. An increasing number of papers show that adenomyosis could negatively affects not only fertility but also pregnancy outcomes, including PTB and placenta-related disorder (5). The hypothetical link between adenomyosis and PTB is represented by the role of inflammation, increased myometrial prostaglandin production, and alteration of uterine contractility.

Regarding the proposed increase of placenta disorders, such as placenta previa, the defect of myometrial spiral artery remodeling as well as deeper placentation could be involved as major causes of obstetrical syndromes in uterine adenomyosis. For this reason, a careful evaluation of the uterus, particularly for the presence of features of adenomyosis associated with endometriosis, should provide important information to the clinicians on possible future complications.

Some of the major problems regarding the studies on endometriosis and pregnancy complications are the selection of cases, the difficulty of the patient stratification by stage and type of endometriosis, the presence of adenomyosis, and the possible negative effect of ART. However, a more focused attention to the problem and prospective studies with control groups are necessary for a correct definition of the risk. Obstetrical complications often require quick decisions and adequate preconception diagnosis and counseling, and knowledge of the potential risks related to endometriosis may represent the keys to make the right decision.

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