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Progesterone for preterm birth prevention: the importance of informed consent

Check for updates

TO THE EDITORS: I would like to congratulate Nelson et al[1] for their excellent study on 17-alpha hydroxyprogesterone caproate (17OHP-C) and for their many replies to the follow-up letters. I would like to also recognize the letter writers for enhancing the discussion.

However, one critical element that seems to be missing from the debate is that ultimately it is up to the pregnant woman herself to decide what medications she will use or be given. Physicians can recommend 17OHP-C (or not), but the patient makes the ultimate call. Truly informed consent requires a full discussion of risks, benefits, and alternatives. For 17OHP-C, the risks are injection site reactions, likely increased rates of gestational diabetes,[1,2] and possibly increased rates of miscarriage and stillbirth.[3]

These risks are detailed on the Makena label. Another risk is the unknown long-term effects of being exposed to a synthetic progestin throughout fetal development. The benefit is that 17OHP-C might help to prevent recurrent preterm delivery, although this has been shown in only 1 study,[4] about which there are serious concerns.

The alternative is some combination of watchful waiting/serial cervical ultrasound/cerclage and/or vaginal progesterone. In my personal experience, most patients who receive full counseling on this issue decline 17OHP-C. However, some do opt to be given it. The key here is that the patient receives full and accurate counseling so that she can actually provide proper informed consent. I am curious to know how Nelson et al would summarize their patient counseling in this area. ■

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REPLY

Check for updates

We thank Dr Urato for his interest in our report[1] published in the Journal in June 2017 as well as his recent letter on patient consent for obstetric interventions. We have and continue to fully support a patient's unchallengeable right to decline any obstetric intervention including 17-alpha hydroxyprogesterone caproate (17OHP-C) for prevention of preterm birth.

The Society for Maternal-Fetal Medicine (SMFM) and the American College of Obstetricians and Gynecologists have both endorsed the use of 17OHP-C for the prevention of preterm birth in singleton pregnancies.[2,3] Most recently, in January 2017, the SMFM Publications Committee once again emphasized 17OHP-C be used for the prevention of recurrent preterm birth. Indeed, the SMFM noted that there continued to be an underutilization of 17OHP-C in the United States despite this recommendation.[4]

We were intrigued by Dr Urato's statement, "In my personal experience, most patients who receive full counseling …

decline 17OHP-C," meaning that more than 50% decline. Such a high rate seemed unexpected. We offer our gratitude to Dr Urato for his presumed inclusion of our published results on 17OHP-C in his comprehensive counseling with each patient. ■

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Regenerative medicine in treatment of fecal incontinence: do we understand how it works?

Check for updates

TO THE EDITORS: We read with great interest the article by de Ligny et al,[1] and we think it is an important addition to the current literature on the use of regenerative medicine in treatment of fecal incontinence. We have a few comments on this systematic review that may help deliver its message to the readership.

According to the authors, the use of regenerative medicine in the treatment of fecal incontinence can be applied through 1 of 3 main channels: injection of cells, scaffolds, and trophic factors. It is important to note that regenerative medicine, as the term implies, aims at healing of injured tissues by regeneration, not by fibrosis.

Because regenerative medicine is still evolving, several concepts about tissue healing and the role of stem cells in healing are still not clear. The current concept in regenerative medicine is based on the stem-cell paradigm that suggests that stem cells can differentiate into any type of parenchymal cell and are responsible for healing by regeneration.[2]

In light of this theory, local injection of stem cells at the site of injury, with or without adjunct stimulation or scaffolding, results in healing of injured tissue by regeneration. Although this concept seems ideal and simple, previous studies failed to prove the validity of this hypothesis.[3]

An alternative paradigm of healing by regeneration may exist. Bone marrow–derived progenitor cells may initiate the first step in the regeneration process by the formation of connective tissue stroma that subsequently is infiltrated by parenchymal cells from the surrounding tissues.[4] It is suitable to assume that, if stroma formation by the bone marrow–derived progenitor cells was deficient and took a prolonged duration, then the parenchymal stem/progenitor cells that were stimulated by injury will not find a suitable stroma to proliferate within which will impair the process of regeneration.

Healing of injured skeletal muscles is a vivid example of this regenerative healing process because it entails healing of tissues composed of parenchyma and stroma. Experimental studies have suggested that healing of injured skeletal muscles can occur by regeneration even without the injection of stem cells. By critically studying the results of different and apparently conflicting experimental studies, stem-cell injection seems to accelerate the regenerative healing of injured skeletal muscles.[4] ■

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