# Surgical variance between post-conceptional and pre-conceptional minimally invasive trans-abdominal cerclage placement

Check for updates

TO THE EDITORS: We read with interest the article "Surgical variance between postconceptional and preconceptional minimally invasive transabdominal cerclage placement" by Moawad et al, in which they describe the variance of transabdominal cerclage by robotic assistance.[1] We fully agree with the authors and affirm that it is necessary to provide high and isthmic strapping when McDonald-type strapping has not been effective in women with repeated late miscarriages.

We are surprised that the authors mention only 2 initial routes for the establishment of cervico-isthmic cerclage, 3 with the robot-assisted transabdominal cerclage procedure.[2] Our attention is also drawn to the mention of the laparotomy route, which seems an obsolete pathway in this kind of indication.

It seems that the authors have forgotten to mention the possibility of the vaginal cervico-isthmic cerclage technique.[3] Cervico-isthmic cerclage is usually performed between 12 and 16 weeks' gestation in women presenting with high risk of preterm delivery: prior histories of pregnancy losses in the second trimester, prior failure of McDonald cerclage, and/or absent portio vaginalis of the cervix. A polypropylene tape is placed at the cervico-isthmic junction via the vaginal route. Cesarean delivery is systematically performed in all patients because the cerclage is considered to be definitive. In a retrospective cohort study of 125 women, the mean operative time of cervico-isthmic cerclage was around 35 minutes and the hospitalization stay around 1 day. The total percentage of neonatal survival after 14 weeks was 91%.[3]

In a case series of 6 patients, 5 of whom had failed vaginal cerclage in a previous pregnancy, robot-assisted abdominal cerclage during pregnancy seemed to be safe and effective,[2] but the mean operative time was 4.5 times longer than that for transvaginal cervicoisthmic cerclage in the cohort above and 3 times longer than that of women undergoing laparoscopic abdominal cerclage in another series.[4] Transvaginal cervicoisthmic cerclage with polypropylene sling may be considered as an effective and minimally invasive alternative to the transabdominal cervicoisthmic cerclage by laparoscopy or laparotomy in women presenting with high risk of preterm delivery.

Surgery should be performed preferably during the pregnancy to avoid surgery for women who will be never pregnant. Indeed, 2 possible disadvantages of preconceptional procedures are first-trimester miscarriages and infertility. With the results of a systematic review on preconceptional procedures, we concluded that approximately 22% of the women did not become pregnant after the preconceptional procedure,[5] but no information was given on the reason for the infertility.

To conclude, it seems important to offer the possibility of a definitive cervico-isthmic cerclage for a patient with failed McDonald cerclage by proposing the simplest and safest surgical alternatives, including the vaginal route. ■

Solene Vigoureux, MD
Department of Obstetrics and Gynecology
Hôpital Bicêtre, Assistance Publique Hôpitaux de Paris (APHP)
Le Kremlin-Bicêtre, France
Faculté de Médecine Paris-Sud, Université Paris-Sud, 94276
Le Kremlin-Bicêtre, France
INSERM
CESP Centre for Research in Epidemiology and
Population Health, U1018
Villejuif, France
solene.vigoureux@aphp.fr

Perrine Capmas, MD
Department of Obstetrics and Gynecology
Hôpital Bicêtre, Assistance Publique Hôpitaux de Paris (APHP)
Le Kremlin-Bicêtre, France
Faculté de Médecine Paris-Sud, Université Paris-Sud, 94276
Le Kremlin-Bicêtre, France
INSERM
CESP Centre for Research in Epidemiology and
Population Health, U1018
Villejuif, France

Hervé Fernandez, MD
Department of Obstetrics and Gynecology
Hôpital Bicêtre, Assistance Publique Hôpitaux de Paris (APHP)
Le Kremlin-Bicêtre, France
Faculté de Médecine Paris-Sud, Université Paris-Sud, 94276
Le Kremlin-Bicêtre, France
INSERM
CESP Centre for research in Epidemiology and
Population Health, U1018
Villejuif, France

The authors report no conflict of interest.

## REFERENCES

1. Moawad GN, Tyan P, Awad C, Khalil EDA. Surgical variance between postconceptional and preconceptional minimally invasive transabdominal cerclage placement. Am J Obstet Gynecol 2018. Available at: https://www.ajog.org/article/S0002-9378(18)30612-4/fulltext. Accessed Sept. 16, 2018.

2. Zeybek B, Hill A, Menderes G, Borahay MA, Azodi M, Kilic GS. Robot-assisted abdominal cerclage during pregnancy. JSLS 2016;20. e2016.00072.
3. Neveu M-E, Fernandez H, Deffieux X, Senat M-V, Houllier M, Capmas P. Fertility and pregnancy outcomes after transvaginal cervico-isthmic cerclage. Eur J Obstet Gynecol Reprod Biol 2017;218:21–6.
4. Shin S-J, Chung H, Kwon S-H, Cha S-D, Lee H-J, Kim A-R, et al. The feasibility of a modified method of laparoscopic transabdominal cervicoisthmic cerclage during pregnancy. J Laparoendosc Adv Surg Tech A 2015;25:651–6.
5. Moawad GN, Tyan P, Bracke T, Abi Khalil ED, Vargas V, Gimovsky A, et al. Systematic review of transabdominal cerclage placed via laparoscopy for the prevention of preterm birth. J Minim Invasive Gynecol 2018;25:277–86.

 https://doi.org/10.1016/j.ajog.2018.10.030

# 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. ■

Adam C. Urato, MD
Chief, Maternal-Fetal Medicine
MetroWest Medical Center
115 Lincoln Street
Framingham, MA 01702
Beth Israel Deaconess Medical Center
Saint Elizabeth's Medical Center
Boston, MA
aurato@bidmc.harvard.edu

The author reports no conflict of interest.

**REFERENCES**

1. Nelson DB, McIntire DD, McDonald J, et al. 17-Alpha hydroxyprogesterone caproate did not reduce the rate of recurrent preterm birth in a prospective cohort study. Am J Obstet Gynecol 2017;216:600.e1–9.
2. Rebarber A, Istwan NB, Russo-Stieglitz K, et al. Increased incidence of gestational diabetes in women receiving prophylactic 17α-hydroxyprogesterone caproate for prevention of recurrent preterm delivery. Diabetes Care 2007;30:2277–80.
3. Food and Drug Administration. Center for Drug Evaluation and Research. Application number: 21945Orig1s000. Medical Review, page 48. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/nda/2011/021945Orig1s000MedR.pdf. Accessed Sept. 24, 2018.
4. Meis PJ, Klebanoff M, Thom E, et al. Prevention of recurrent preterm delivery by 17 alpha-hydroxyprogesterone caproate. N Engl J Med 2003;348:2379–85.

 https://doi.org/10.1016/j.ajog.2018.12.012

## 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 …