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No. 467, May, 2026 (Replaces Guideline No 398: Progesterone for Prevention of Spontaneous Preterm Birth, June 2020)

Technical Update No. 467: Progesterone for Previous Spontaneous Preterm Birth

(En français : La progestérone en cas d'antécédents d'accouchement prématuré spontané)

The English document is the original version; translation may introduce small differences in the French version.

This Technical Update was reviewed by the SOGC Clinical Obstetrics Committee and approved by the SOGC Guideline Management and Oversight Committee. This Technical Update supersedes components of No. 398, published in June 2020.

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This document reflects emerging clinical and scientific advances as of the publication date and is subject to change. The information is not meant to dictate an exclusive course of treatment or procedure. Institutions are free to amend the recommendations. The SOGC suggests, however, that they adequately document any such amendments.

Informed consent: Patients have the right and responsibility to make informed decisions about their care, in partnership with their health care provider. To facilitate informed choice, patients should be provided with information and support that is evidence-based, culturally appropriate, and personalized. The values, beliefs, and individual needs of each patient in the context of their personal circumstances should be considered and the final decision about care and treatment options chosen by the patient should be respected.

Language and inclusivity: The SOGC recognizes the importance to be fully inclusive and when context is appropriate, gender-neutral language will be used. In other circumstances, we continue to use gendered language because of our mission to advance women's health. The SOGC recognizes and respects the rights of all people for whom the information in this document may apply, including but not limited to transgender, non-binary, and intersex people. The SOGC encourages health care providers to engage in respectful conversation with their patients about their gender identity and preferred gender pronouns and to apply these guidelines in a way that is sensitive to each person's needs.

Weeks Gestation Notation: The authors follow the World Health Organization's notation on gestational age: the first day of the last menstrual period is day 0 (of week 0); therefore, days 0 to 6 correspond to completed week 0, days 7 to 13 correspond to completed week 1, etc.

Subject Categories: Maternal-fetal medicine; obstetrics

Keywords : administration; intravaginal; cervical length measurement; obstetric labor; premature; pregnancy complications; pregnancy outcome; premature birth; progesterone

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KEY MESSAGES

1. Progesterone therapy for prevention of spontaneous preterm birth should be used in women with a short cervix (≤ 25 mm) in the current pregnancy (between 16–24 weeks) but not in those with previous spontaneous preterm birth and a normal transvaginal cervical length.
2. Universal cervical length screening by transvaginal ultrasound for identification of women at an increased risk of spontaneous preterm birth followed by vaginal progesterone therapy in those with a short cervix is indicated as it reduces the incidence of spontaneous preterm birth and is cost effective.

Comparison of Recommendations

Topics	2026 Updated Recommendations	2020 Recommendations ¹
Primary Indication for Progesterone	Recommended only for short cervix (≤ 25 mm) in current pregnancy. Strength: Strong Evidence: Moderate	Recommended for women with previous SPB or short cervix (≤ 25 mm). Strength: Strong Evidence: Moderate
Previous SPB with Normal Cervix	Do NOT use progesterone if cervical length > 25 mm. Strength: Strong Evidence: Moderate	Progesterone recommended (singleton pregnancy). Strength: Strong Evidence: Moderate
Multiple Pregnancy	Not recommended without cervical shortening Strength: Strong Evidence: Moderate	Recommended for short cervix, insufficient evidence for all multiples. Strength: Strong (short cervix) / Conditional (general multiples) Evidence: Moderate–Low
Universal Cervical Length Screening	Strongly advocates universal screening at anatomy scan by transvaginal ultrasound. Strength: Strong Evidence: Moderate	Suggested for high-risk cases; not universal. Strength: Conditional Evidence: Low
Cerclage vs Progesterone	Mentions consideration of cerclage for severe cervical shortening; progesterone not indicated without shortening. Strength: Conditional Evidence: Low	Progesterone considered effective and less invasive than cerclage. Strength: Strong Evidence: Moderate
Aspirin Use	Investigational; possible benefit in placental dysfunction subset. Strength: Conditional Evidence: Low	Not addressed.
Route & Dose	No change in dosing discussed; focus on indication.	Vaginal micronized progesterone: 200 mg (singleton), 400 mg (multiples). Strength: Strong Evidence: Moderate
Timing of Therapy	Same timing for short cervix; no therapy for prior SPB with normal cervix.	Start at 16–24 weeks; continue up to 34–36 weeks. Strength: Strong Evidence: Moderate
Safety	Raises concern about maternal complications (gestational hypertension, infection, cholestasis).	No adverse maternal or neonatal effects reported. Strength: Conditional Evidence: Low

ABSTRACT

Objective: To assess the benefits and risks of progesterone therapy for women at increased risk of spontaneous preterm birth and to make recommendations for the use of progesterone to reduce the risk of spontaneous preterm birth and improve postnatal outcomes.

Target Population: Pregnant women at increased risk of spontaneous preterm birth (SPB) solely because of prior spontaneous preterm birth.

Options: To administer or withhold progesterone therapy for women deemed to be at high risk of SPB.

Outcomes: Preterm birth, neonatal morbidity and mortality, and postnatal outcomes including neurodevelopmental outcomes.

Benefits, Harms, and Costs: Therapy with progesterone significantly reduces the risk of spontaneous preterm birth only in some subpopulations of women at increased risk. Although this therapy entails a cost to the woman in addition to the discomfort associated with its use, no other significant adverse effects to the mother or the newborn have been identified.

Evidence: Medline, PubMed, EMBASE, and the Cochrane Library were searched from November 2018 to November 2025 for medical subject heading (MeSH) terms and keywords related to pregnancy, preterm birth, previous preterm birth, neonatal morbidity and mortality, and postnatal outcomes. This document represents an abstraction of the evidence rather than a methodological review.

Validation Methods: The authors rated the quality of evidence and strength of recommendations using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach. See online [Appendix A \(Tables A1 for definitions and A2 for interpretations\)](#).

Intended Audience: Obstetric care providers, including obstetricians, family physicians, nurses, midwives and maternal-fetal medicine specialists

Social Media Abstract: Progesterone therapy should be used in women with a short cervix on transvaginal imaging (≤ 25 mm) in

the current pregnancy (between 16-24 weeks) but not in those with a history of spontaneous preterm birth and a normal cervical length.

SUMMARY STATEMENTS:

1. Progesterone therapy reduces the risk of spontaneous preterm birth in women with a short cervix (transvaginal length ≤ 25 mm) during the current pregnancy, when initiated between 16 and 24 weeks of gestation. However, it does not reduce the risk in women with a history of preterm birth who have a normal cervical length in their current singleton or twin pregnancy. (*moderate*)
2. Current evidence does not support the use of aspirin for prevention of spontaneous preterm birth. (*low*)
3. Universal cervical length screening by transvaginal ultrasound for identification of women who would benefit from vaginal progesterone followed by progesterone therapy as indicated reduces the risk of spontaneous preterm birth and is also cost effective. (*moderate*)

RECOMMENDED CHANGES IN PRACTICE:

1. Progesterone should not be used for prevention of spontaneous preterm birth in women with prior spontaneous preterm birth and a normal transvaginal cervical length in the current pregnancy. (*strong, moderate*)
2. All pregnant women should undergo universal cervical length screening via transvaginal ultrasound between 18 and 24 weeks of gestation to identify those at increased risk of spontaneous preterm birth. (*strong, moderate*)

RECOMMENDATIONS:

1. Prenatal care providers should not prescribe vaginal progesterone therapy for prevention of spontaneous preterm birth in women with previous preterm birth without concurrent cervical shortening in singleton or twin pregnancies (transvaginal length ≤ 25 mm). (*strong, moderate*)
2. Health authorities, institutions, and physicians in Canada (and internationally) should consider implementing universal cervical length screening using transvaginal ultrasound during the routine fetal anatomy scan, where feasible. (*strong, moderate*)

INTRODUCTION

Progesterone therapy reduces the risk of spontaneous preterm birth (SPB) in certain subpopulations of women at an increased risk.¹ Use of vaginal progesterone therapy for prevention of SPB has been recommended for women with a singleton pregnancy, a twin pregnancy or a higher-order multiple pregnancy and a short cervical length (≤ 25 mm by transvaginal ultrasound between 16 and 24 weeks).^{1,2} Vaginal progesterone therapy for prevention of SPB has also been recommended for women with previous SPB.¹ However, since the publication of these guidelines, ongoing studies and cumulative data have questioned the utility of vaginal progesterone in women with previous SPB and a normal cervical length in the index pregnancy.

This document will review the current evidence related to use of vaginal progesterone for prevention of SPB in women with previous SPB in absence of concurrent cervical shortening. This document will also explore the risk-specific management options for women with prior SPB in context of universal cervical length screening. Evidence related to other indications for vaginal progesterone use for prevention of SPB, therapeutic dose of vaginal progesterone or duration of therapy will not be reviewed in this document, please refer to the original document for guidance.

PREVIOUS SPONTANEOUS PRETERM BIRTH IS A RISK FACTOR FOR RECURRENCE

Prior preterm birth increases the likelihood of occurrence in a subsequent pregnancy. For singleton pregnancies the risk of recurrent preterm birth ranges from 20-35% as opposed to preterm birth risk of 5% in those without a prior preterm birth.³⁻⁹ For singleton pregnancies, the majority of preterm birth (up to 90% before 34 weeks and 85% before 37 weeks) occurs in women with no prior preterm birth.^{3,4} The risk of recurrent preterm birth correlates negatively with gestational age at prior preterm birth (higher with preterm birth at an earlier gestational age) and positively with the number of prior preterm births, with a similar correlation for SPB.^{5,6,9} Twin pregnancies are at a higher background risk of preterm birth ($\sim 60\%$, with $\sim 10\%$ being < 32 weeks), with a further increase in risk with prior SPB.¹⁰

ABBREVIATIONS

SPB Spontaneous preterm birth

IMPACT OF PROGESTERONE ON RECURRENT SPONTANEOUS PRETERM BIRTH RISK

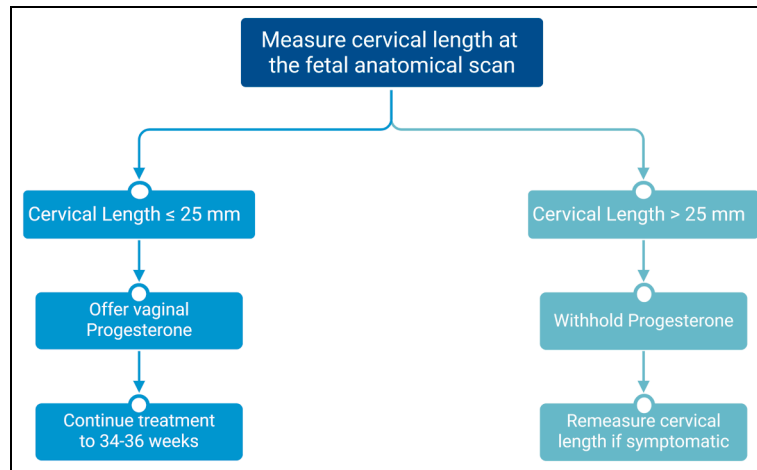
Data regarding the utility of progesterone supplementation in women with prior SPB with a normal cervical length have been conflicting.^{11,12} This is not unexpected, given a very diverse etiology of spontaneous preterm birth, including the association with placental dysfunction.¹¹⁻¹⁵ Most recent studies and metaanalyses evaluating women with prior preterm birth without cervical shortening (≤ 25 mm) in the index pregnancy have failed to confirm efficacy of progesterone in reducing the risk of preterm birth.^{5,6,16-21} Further, progesterone has not been shown to reduce the risk of preterm birth in twin pregnancies in absence of a short cervix; interestingly it may potentially increase the risk.^{10,18,22-24} There is insufficient evidence for pregnancies with higher order multiples. In summary, a vast preponderance of evidence does not support the use of progesterone for prevention of SPB in singleton or twin pregnancies with prior preterm birth in the presence of a cervical length > 25 mm. Further, the possibility of an increase in maternal complications with vaginal progesterone use has been raised, mostly resulting from a trend towards increased incidence of gestational hypertension and maternal infection.²² Progesterone may also increase the risk of intrahepatic cholestasis.^{25,26} Long-term follow-up studies in babies have not identified any harmful effects.²⁷ Based on the current evidence, continued use of vaginal progesterone for SPB prevention in women with prior SPB in absence of cervical shortening is not justifiable. Further, in situations where use of progesterone is being considered, discussion of the potential risks with the patient is important, whereby allowing shared decision making.

SUMMARY STATEMENT 1 and RECOMMENDATION 1

MANAGEMENT OF WOMEN WITH PREVIOUS SPONTANEOUS PRETERM BIRTH

Utility of universal cervical screening for identification of women at risk of preterm birth has been debated, and thus it is not a current standard of care in Canada.^{8,28,29} However, universal cervical length screening by transvaginal ultrasound (up to 24 weeks of gestation) and vaginal progesterone therapy in women with cervical shortening has been found to be cost effective in diverse health care systems (including those similar to Canada) for singleton as well as twin pregnancies.^{2,7,30-33} Further, this intervention has been associated with a reduction in incidence of preterm birth.^{2,30,32,34}

Clinical Algorithm for Progesterone Use in Preterm Birth Prevention



For both universal and targeted (previous spontaneous preterm birth) screening.

Until such time that universal cervical length is implemented and becomes readily available, transvaginal sonography for assessment of cervical length is recommended in women at increased risk of preterm birth.^{35,36} In women with prior SPB, this can be undertaken at the fetal anatomical scan that is usually done at 18-20 weeks of gestation, with no further intervention warranted if the cervical length is normal (>25 mm).³⁷ In case transvaginal sonography is not easily accessible, an estimate of cervical length by transabdominal sonography may need to be considered for decision making. Vaginal progesterone has similar efficacy to cervical cerclage in most women with a short cervix, in women with a severe shortening or dilation of cervix, a cervical cerclage may need consideration.^{32,38,39} Current evidence does not support the use of a pessary for prevention of spontaneous preterm birth.^{21,40}

Can any other therapy be offered to women with prior SPB and a normal cervical length? Based on the diverse etiology of SPB, a potential role for aspirin has been investigated; findings are promising yet remain inconclusive thus far.^{12,13,15,21,41-44} It is quite likely that aspirin therapy is beneficial in a subset of patients who are at an increased risk of spontaneous preterm birth because of placental dysfunction, however, more research is needed.

SUMMARY STATEMENTS 2, 3 and RECOMMENDATION 2

CONCLUSION

The majority of women with a singleton pregnancy and prior preterm birth will deliver at term. In the absence of

concurrent cervical shortening, use of vaginal progesterone does not reduce the risk of recurrent preterm birth for singleton, twin or higher order multiple pregnancies. Women with prior SPB should undergo transvaginal assessment of cervical length at the fetal anatomical scan to determine the need for progesterone therapy. Implementation of universal cervical length screening to identify women who would benefit from progesterone or other therapies is urgently required.

SUPPLEMENTARY DATA

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jogc.2026.103272>.

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