Keywords: Opioid use disorder, medication assisted therapy, neonatal outcomes, neonatal abstinence syndrome, pregnancy, opioid use disorder in pregnancy, buprenorphine, suboxone, subutex, NICU

PP-020 Comparative review of major guidelines on cervical cerclage

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Objective: The aim of this study was to review and compare the most recently published major guidelines on the indications, contraindications, techniques and timing of placing and removal of cervical cerclage, which represents one of the limited effective measures currently available for the prevention of preterm labor caused by cervical insufficiency contributing in the reduction of neonatal morbidity and mortality rates, worldwide.

Methods: TA descriptive review of guidelines from the American College of Obstetricians and Gynecologists, the Royal College of Obstetricians and Gynaecologists, the Society of Obstetricians and Gynaecologists of Canada and the International Federation of Gynaecology and Obstetrics on cervical cerclage was carried out.

Results: There is consensus among the reviewed guidelines regarding the recommended techniques, the physical examination-based indications for cervical cerclage, the contraindications as well as the optimal timing of placement and removal. All medical societies also agree that ultrasound-indicated cerclage is justified in women with history of prior spontaneous preterm labor or mid-trimester loss and a short cervical length detected on ultrasound. In addition, following cerclage, serial sonographic measurement of the cervical length, bed rest and routine use of antibiotics, tocolysis and progesterone are unanimously discouraged. In case of established preterm labor, cervical cerclage should be removed, according to the American, the English and the Canadian guidelines. Furthermore, the Royal College of Obstetricians and Gynaecologists and the Society of Obstetricians and Gynaecologists of Canada agree on the prerequisites that should be met before attempting CC. These two guidelines along with the International Federation of Gynaecology and Obstetrics recommend history-indicated cerclage for women with three or more previous preterm deliveries and/or 2nd trimester pregnancy losses, while the American College suggests the use of cerclage in singleton pregnancies with one or more previous 2nd trimester miscarriages related to painless cervical dilation or prior cerclage due to painless cervical dilation in the 2nd trimester. The role of amniocentesis in ruling out intra-amniotic infection before rescue cerclage remains a matter of debate. As for preterm premature rupture of membranes, the Royal College points out that if it occurs between 24 and 34 weeks of gestation and there are no signs of infection or preterm labor, cerclage removal should be delayed for 48 hours in order to allow in utero transfer.

	ACOG	RCOG	SOGC	FIGO
History-indicated CC	Recommended for singleton pregnancy with ≥1 previous 2nd trim pregnancy loss related to painless cervical dilation (no labor or abruptio placentae) OR prior cerclage due to painless cervical dilation in the 2nd trim.	Recommended for women with ≥3 previous PTL and/or 2nd trim pregnancy losses. Not recommended for twin pregnancies.	Recommended for women with ≥3 previous extreme PTL or 2nd trim pregnancy losses (no other cause identified). Not recommended for twin pregnancies.	Recommended for women with ≥3 previous PTL or 2nd trim pregnancy losses.
Ultrasound-indicated CC	Recommended for singleton pregnancy with prior spontaneous PTL at <34w AND currently short CL (<25 mm) before 24w. Not recommended without such history or twin pregnancies.	Recommended for women with short CL (≤25 mm) before 24w AND ≥1 prior spontaneous PTL or mid-trim loss. Not recommended without history or in case of cervical funneling without shortening or twins.	Consider if CL≤25mm before 24w AND ≥1 prior spontaneous PTL or possible cervical insufficiency. Not recommended if short CL without such history or twin pregnancies.	Recommended for short CL (<25 mm) before 24w AND ≥1 prior spontaneous PTL or mid-trim loss. Not recommended if short CL without history. Consider in high-risk women without history or twin pregnancies with CL<15mm.
Physical examination-indicated CC (Rescue CC)	Recommended for singleton pregnancy with painless cervical dilation in the 2nd trim (exclude uterine activity and intraamniotic infection).	Individualized decision.	Consider in case of dilation 1-4cm before 24w +/- fetal membrane exposure and in twin pregnancies with cervical dilation >1cm prior to viability.	Consider in case of cervical shortening and dilatation with fetal membrane exposure.

Conclusion: Cervical cerclage is an obstetric intervention used to prevent miscarriage and preterm labor in women considered as high-risk for these common pregnancy complications. The development of uniform international practice protocols for the insertion of cervical cerclage seems of paramount importance and will hopefully improve the outcomes of such pregnancies.

Keywords: Cervical cerclage, cervical insufficiency, preterm delivery, preterm labor, preterm birth, cervical pessary, progesterone, PPROM, guidelines, management