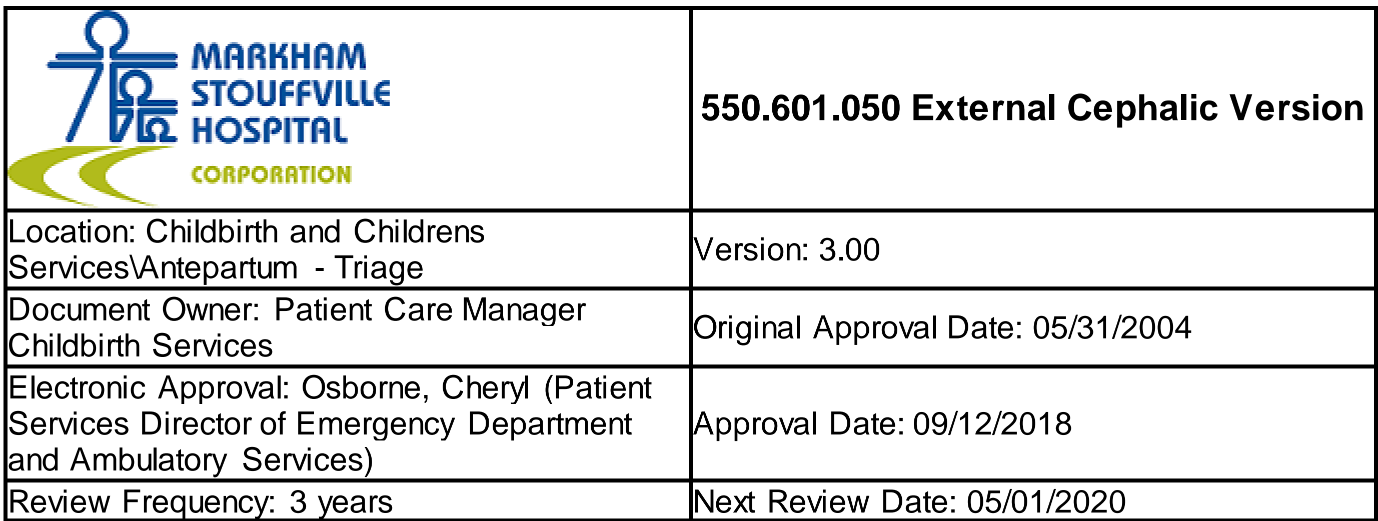

MARKHAM STOUFFVILLE HOSPITAL CORPORATION	550.601.050 External Cephalic Version
Location: Childbirth and Childrens Services\Antepartum - Triage	Version: 3.00
Document Owner: Patient Care Manager Childbirth Services	Original Approval Date: 05/31/2004
Electronic Approval: Osborne, Cheryl (Patient Services Director of Emergency Department and Ambulatory Services)	Approval Date: 09/12/2018
Review Frequency: 3 years	Next Review Date: 05/01/2020

PURPOSE AND SCOPE:
The purpose of this document is:
1. To ensure external cephalic version (ECV) is an available option for pregnant women that meet the pre-requisites and lack any contraindications.
2. To guide care for an obstetrical client making an informed choice for external cephalic version (ECV).
3. To ensure ECV is performed in a facility with ready access to emergency cesarean delivery and skilled healthcare providers (HCPs).

The scope of this document applies to all Childbirth and Children's Services (CCS) perinatal nurses (RN and/or RPN) and Most Responsible Providers (MRP) working within Markham Stouffville Hospital (MSH) CCS and/or AMU.

POLICY STATEMENT(S):
The policy of MSH CCS is to ensure the opportunity for pregnant women to make informed decisions for evidence-based options that promote vaginal cephalic delivery as well as optimal maternal and perinatal outcomes at MSH.

External cephalic version (ECV) will only be performed in the CCS when facilities and personnel are available for immediate cesarean section (C/S). ECV will be offered to pregnant women with the following prerequisites:
1. Breech or transverse lie,
2. Gestation 36 weeks or greater,
3. Singleton pregnancy,
4. No contraindication to labour,
5. Adequate amniotic fluid volume,
6. Fetal well-being established prior to procedure, <u>AND</u>
7. Availability of ultrasound

PROCEDURE:
*See Appendix A: Contraindications to ECV
*See Appendix B: Risks of ECV
*See Appendix C: Predictors for ECV Success

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<table>
<tr><th colspan="2">Preparing to Perform ECV</th></tr>
<tr><td>Childbirth and Children's Services (CCS) Facilitating Nurse (FN)</td><td>1. After receiving an ECV request from a MRP, schedule the elective ECV based on the MSH internal policy titled Scheduling and Prioritizing Obstetrical Procedures (020.601.010)
2. Request secretary notify client of scheduled ECV date/time</td></tr>
<tr><td>Secretary</td><td>1. In advance, notify client of scheduled ECV date/time
2. Upon client arrival, register visit under obstetrical assessment unit (OAU)
3. Ensure MSH identification arm band is applied to client wrist
4. Notify CCS FN or Perinatal RN of client presence</td></tr>
<tr><td>Perinatal Nurse or Registered Midwife (RM)</td><td>1. Review client chart
2. Document client medical and obstetrical history; current medications; and any allergies
3. Perform initial assessment: include vital signs, uterine activity, any PV loss, and fetal status:
o A Non-stress Test (NST) or a Biophysical Profile (BPP), as ordered, must be performed before ECV
• FHR (or BPP) should be reported as normal per Fetal Health Surveillance (FHSL) guidelines before ECV attempt
4. Ensure MRP obtains and documents informed consent from client after discussing:
a. Procedure purpose
b. Benefits
c. Risks
d. Alternatives
e. Plan of care if ECV is successful (e.g. expectant management or induction of labour)
f. Plan of care if ECV is unsuccessful (e.g. repeat ECV attempt another day or booked cesarean section (C/S))
5. Request that the MRP notify:
a. Anesthesia on duty before initiating ECV attempt
b. CCS FN before initiating ECV attempt
c. If MRP is a RM or General Practitioner (GP) with delivering privileges at MSH, then RM or GP will notify OB on call before initiating ECV attempt to ensure adequate resources available prn
6. Ensure the availability of an Obstetrical Procedure Room (OR) in case an emergency C/S is required
7. Anticipate MRP or Anesthesiologist may order bloodwork (CBC and/or Group and Screen) and/or IV access with saline lock before ECV attempted
8. Expect the MRP to perform bedside ultrasound immediately prior to</td></tr>
</table>

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<table>
<tr><td></td><td>procedure (i.e. fetal presentation, amniotic fluid volume, and placenta location)</td></tr>
<tr><td colspan="2">Performing ECV</td></tr>
<tr><td>Nurse or Registered Midwife (RM)</td><td>1. Anticipate intermittent ultrasound during procedure
2. MRP may use ultrasound gel as lubricant
3. Perform Fetal Heart Rate (FHR) q2 minutes during attempt (IA or visualization of fetal heart beat via ultrasound by MRP)
4. Document:
• Start time of procedure
• VS and FHR +/- any uterine activity or PV loss
• Tolerance to procedure (maternal and fetal)
• End time of ECV attempt
• Number of attempts
5. Anticipate need to administer a tocolytic, as ordered by MRP, to promote uterine relaxation during procedure
6. Anticipate sedation administration by Anesthesiologist prn to promote relaxation and comfort for client
7. After 5 minutes of ECV attempt, allow client to rest for 2 minutes before re-attempting ECV; Ensure ongoing client consent
8. Avoid more than 4 attempts during 1 OAU visit
9. Stop procedure at any time client reports too much discomfort or if FHR is classified as atypical or abnormal
• If an abnormal FHR does not recover with intrauterine resuscitation measures, prepare for emergency Cesarean Section (C/S).</td></tr>
<tr><td colspan="2">Post ECV</td></tr>
<tr><td>Nurse or Registered Midwife (RM)</td><td>1. Following any ECV attempt, perform the following assessments: maternal VS, uterine activity, PV loss, and FHR status with electronic fetal monitoring (EFM) for at least 30 minutes
2. If FHR is atypical or abnormal:
• Notify MRP
• Perform intrauterine resuscitation
• Anticipate further orders
3. Prior to discharge home provide education, including but not limited to:
• Fetal Movement Counting
• Plan of Care
• Reasons to contact MRP, if RM patient <u>or</u> CCS OAU Nurse (e.g. abdominal pain, labour, bleeding, fluid leakage, fever, decreased fetal movement)
4. If client is unsensitized Rh negative, expect MRP orders for Group and Screen post-procedure and intramuscular (IM) Rh immunoglobulin (Rhig) 300mcg x 1 dose before discharge home (providing delivery is not scheduled within 72h of ECV)</td></tr>
</table>

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	• Kleihauer- Betke may not be necessary post-ECV because 300mcg Rhig will cover up to a 30cc bleed (and only 0.08% will have bleed greater than 30cc; MoreOB, 2017
Secretary	1. If Rhig is required, ensure bloodwork orders are entered and request release of blood product for administration 2. If ECV is successful, the client will be discharged home and antenatal records must be maintained for subsequent visit(s) 3. If ECV is unsuccessful, MRP and/or CCS FN may request assistance with re-scheduling either a repeat ECV attempt and/or a booked C/S 4. In rare instances it may be required to admit the client for an emergency cesarean section and assist with organizing resources

DEFINITION(S):

External cephalic Version (ECV): A procedure in which a fetus is turned in utero from a non-cephalic to a cephalic presentation by manipulation of the maternal abdomen. This may be accomplished via forward roll or backward flip.

REFERENCE(S):

Managing Obstetrical Risk Efficiently (MoreOB, September, 2017). *Breech Birth 16th Edition*. Retrieved May 10, 2018 from https://secure.moreob.com/en?t=/contentManager/onStory&e=UTF-8&i=1317992669064&l=0&active=no&sort=Price&StoryID=1472823695903&tmp1=48

The American College of Obstetricians and Gynecologists (ACOG, February, 2016). *External Cephalic Version*. Practice Bulletin Number 161. Retrieved May 10, 2018 from http://www.contemporaryobgyn.net/editors-choice-cog/acog-guidelines-glance-external-cephalic-version

Hofmeyr, G. J. (November, 2017). External Cephalic Version. Retrieved May 10, 2018 from https://www.uptodate.com/contents/external-cephalic-version

RELATED DOCUMENTS:

020.601.010 Scheduling and Prioritizing Obstetrical Procedures

RESPONSIBILITY:

Required Endorsements	Sponsor	Approval Authority

DOCUMENT HISTORY:

Type	Individual/Committee	Date	Outcome

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APPENDICES:

Appendix A: Contraindications to ECV

- Any contraindication to labour:
  - Compromised fetus
  - Abnormal fetal heart rate (FHR) tracing
  - Placenta previa
  - Previous classical uterine incision
  - Previous uterine surgery that would increase risk of uterine rupture (e.g. hysterotomy, myomectomy, full thickness uterine wall incision)
  - Active genital herpes simplex infection
- History of abruption in current pregnancy
- Severe oligohydramnios
- Rupture of membranes (ROM)
- Multiple gestation (except delivery of second twin)
- Active labour with fetal descent
- Gestation less than 34 weeks

Appendix B: Risks Associated with ECV

1. Placental abruption (0.4%-1.0%)
2. ROM (and subsequent possible cord prolapse)
3. Labor
4. Fetal heart rate (FHR) abnormalities
5. Fetal bradycardia necessitating an emergency cesarean delivery (0.5%)
6. Alloimmunization /fetomaternal hemorrhage (0%-5%)

Appendix C: Predictors for ECV Success

- Multiparity
- Lack of engagement
- Relaxed uterus
- Fetal head palpable abdominally
- Low maternal weight
- Posterior placenta
- Complete breech
- Amniotic fluid index >10 cm

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