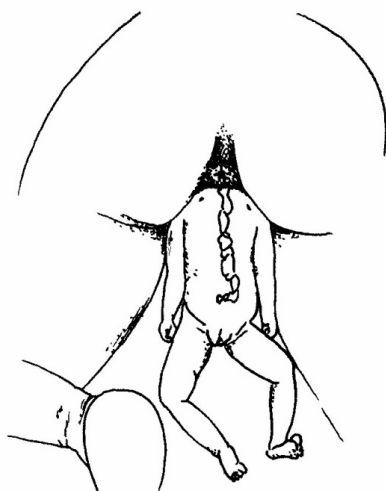


# Upright Breech Birth: When and How to Help



## When the head is high ...

- Arms have birthed
- Baby's face and neck not visible
- Mother's anus not dilated

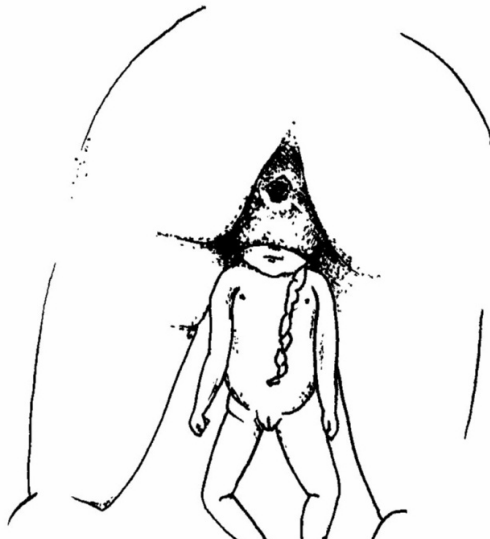
Head may be blocked at pelvic inlet

- Occiput on symphysis
- Bregma on sacral promontory

... and progress has arrested:

Baby's condition	Action	Rationale
<b>GOOD</b> <ul style="list-style-type: none"> <li>• Active movement</li> <li>• Good tone</li> <li>• HR &gt;100</li> <li>• Full cord</li> </ul>	<ul style="list-style-type: none"> <li>• Wait and watch</li> <li>• Be prepared to catch and/or support baby's body to slow descent and birth of head</li> <li>• Progress should resume with next contraction</li> </ul>	<ul style="list-style-type: none"> <li>• Baby's self-flexion efforts will help head to engage and descend most effectively</li> <li>• Non-interference reduces the risk of head extension and early breathing due to startle reflex<sup>1</sup></li> </ul>
<b>POOR / QUESTIONABLE</b> <ul style="list-style-type: none"> <li>• Determine whether head is in the pelvis or trapped at the inlet</li> </ul> <p>(or)</p>	<p><b>Shoulder Press</b>  Hands grip shoulder girdle  Fingers on shoulder blades  Thumbs at distal aspect of clavicle</p> <p><b>Lift baby</b> &amp; head off pelvic inlet  Pressure at gleno-humeral joint flexes head  Press straight back, towards mother's abdomen</p>	<ul style="list-style-type: none"> <li>• Suprapubic arch flexes head</li> <li>• Reflex stimulation of head flexion muscles<sup>2</sup></li> </ul>
<b>POOR / QUESTIONABLE</b>	<p><b>Lift-Flex-Rotate</b> head off pelvic inlet with hands as in M-S-V</p> <p>AND consider ...</p> <ul style="list-style-type: none"> <li>• Assist woman to become upright on knees (2<sup>nd</sup> midwife)</li> <li>• Encourage her to push</li> </ul> <p>AND</p> <ul style="list-style-type: none"> <li>• Apply suprapubic pressure to assist rotation off pubic bone &amp; flexion (2<sup>nd</sup> midwife)</li> </ul>	<ul style="list-style-type: none"> <li>• Manually assist head flexion and control birth of head</li> <li>• Lift baby's body in line with mother's body to lift head off pelvic inlet</li> <li>• Rotate into oblique or transverse if necessary<sup>3</sup></li> <li>• Maternal straightening /pushing tightens abdominal tone to assist head flexion and stimulate a contraction<sup>4,5</sup></li> </ul>

# Upright Breech Birth: When and How to Help



Breech birth, woman on hands/knees

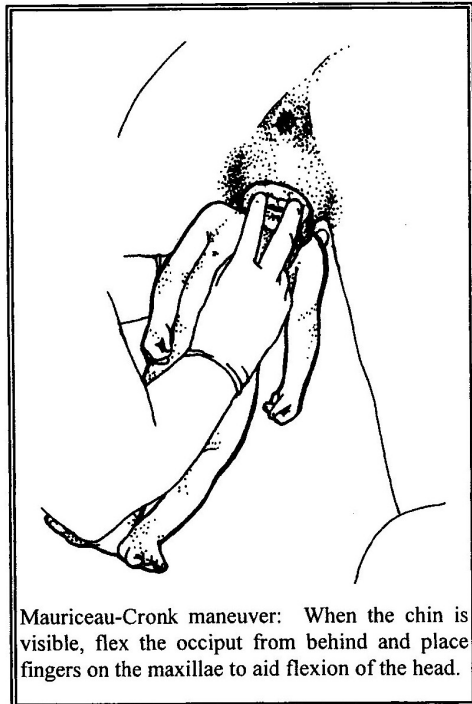
## When the head is low ...

- Chin and neck visible below perianal region
- Suboccipital region under the pubic arch
- Mother's anus dilated

... and progress has arrested:

Action	Rationale
<b>Shoulder Press / Gluteal Lift</b> <ul style="list-style-type: none"> <li>• Press on lower aspect of clavicle, straight back</li> <li>• At the same time, midwife lifts buttocks in opposite direction</li> </ul>	<ul style="list-style-type: none"> <li>• Symphysis pubis flexes head</li> <li>• Lifts perineum over bregma to release head</li> </ul>
<b>Mauriceau-Cronk Manoeuvre</b> <ul style="list-style-type: none"> <li>• Upward support at base of occiput</li> <li>• Other hand - fingers on maxillary bones</li> </ul>	Manually assist head flexion and control birth of the head <sup>6</sup>
<b>Ask mother to assume deep kneeling squat, or lean forward on birthing stool</b> Only while manually supporting head flexion using one of the methods below <sup>2</sup>	<ul style="list-style-type: none"> <li>• Widens pelvic outlet diameter<sup>7</sup></li> <li>• Helps perineum to pass over bregma (forehead)<sup>8</sup></li> </ul>

# Upright Breech Birth: When and How to Help



## Mauriceau-Cronk Manoeuvre

Purpose: Manually assist head flexion and control birth of the head

Upright variation of Mauriceau-Smellie-Veit (recommended by RCOG, 2006 and PROMPT, 2010)

(Image © Mary Cronk, used with permission)

Technique: Support the baby's body with your nondominant forearm, placing your palm toward the occiput. Gently slide your index and middle fingers up behind pubic arch, inside the birth canal and apply upward pressure on baby's occiput. At the same time, slide two fingers of your other hand in, past the perineum, onto baby's maxillary ridge and apply gentle, downward pressure, thus flexing the head. Only after flexion has occurred (and suboccipital area is under pubic

arch), ask the mother to drop down to a low hands-and-knees or knee-chest position. This opens the pelvic outlet and helps the occiput pivot around the pubic arch as the baby's face and bregma pass over the perineum toward you. Follow the rotational movement of the head as it pivots around the pubic bone (Frye A, 2004).

Variation: Maggie Banks (a NZ midwife) uses a further variation, which can be used when the mother is standing or supine. Support the baby's body astride your nondominant forearm, with your palm supporting baby's chest and buttocks in the crook of your arm, near the elbow. Brace your index and middle fingers against the upper border of the superior maxillae to flex the head. Insert the index and middle or ring fingers under the pubic arch, placing one against the posterior side of each of the parietal eminences. To flex the head, apply forward and downward pressure to the parietal eminences while applying downward pressure to the maxillary bones. The mother can lean forward once the suboccipital area is under the pubic arch (Mauriceau-Banks Manoeuvre; Frye A, 2004).

### Safety Precautions:

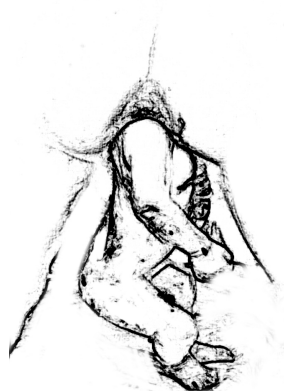
- Bring the vault of the head out as slowly as possible to reduce the chances of intracranial injury
- Unlike classical M-S-V, the manoeuvres described above **do not use shoulder traction**, reducing inherent risks associated with that technique
- While PROMPT (2010) describes using the malar (cheek) bones for M-S-V, the superior maxillary (upper jaw) bones may be easier to reach (especially with perineum intact); their use is reportedly similarly effective and reduces the risk of eye injury

# Upright Breech Birth: When and How to Help

## Assisting the Arms

Image 1: Posterior arm delivered, shoulders in A-P

Image 2: Prayer hands



What you see	Action	Rationale
<b>GOOD</b> <ul style="list-style-type: none"> <li>Baby 'tummy to tummy'</li> <li>Sacro-anterior</li> <li>Completely rotated after birth of legs</li> <li>Sternal crease (cleavage)</li> <li>Good colour, cord, fetal movement</li> </ul>	<ul style="list-style-type: none"> <li>Wait and watch</li> <li>Be prepared to catch and/or support baby's body to slow descent and birth of head</li> <li>Progress should resume after a pause, before the next contraction</li> <li>Head spontaneously rotates to enter pelvis and anterior arm drops down under pubic arch</li> </ul>	<ul style="list-style-type: none"> <li>Baby's self-flexion efforts will help head to engage and descend most effectively</li> <li>Non-interference reduces the risk of head extension and early breathing due to startle reflex<sup>1</sup></li> <li>Sternal crease indicates arms are anterior and will be born soon</li> </ul>
<b>NEEDS HELP</b> <ul style="list-style-type: none"> <li>Legs have birthed, but no further progress with next contraction</li> <li>Rotation incomplete</li> <li>Baby's shoulders in oblique</li> </ul>	<b>Sweep arms down</b> <ul style="list-style-type: none"> <li>Assess position of arms in pelvis</li> <li>Sweep arm down from behind the shoulder, across face</li> <li>Anterior arm (over symphysis) is most common problem - try that first</li> </ul>	<ul style="list-style-type: none"> <li>Assists the rotation to complete its course</li> <li>Rotation, not traction</li> <li>One leg delivering before the other in frank breech may signal possible problem with the arms</li> </ul>
<b>NEEDS HELP</b> <ul style="list-style-type: none"> <li>Legs have birthed, but only posterior arm births under sacrum</li> <li>Baby's shoulders in direct A-P diameter</li> <li>Arm cannot be swept down using above method</li> <li><b>Do not wait</b> for another contraction - intervention required when you see this</li> </ul>	<b>Prayer hands / Shoulder Girdle Grip</b> <ul style="list-style-type: none"> <li>Rotational manoeuvre</li> <li>Use shoulder girdle for upright positions</li> <li>Hands flat, either side of baby's torso (back &amp; front)</li> <li>Fingers up, finger tips touching clavicle, shoulder blades, and keeping chin in alignment</li> <li>Or as above with thumbs in front of clavicle, fingers on shoulder blades</li> </ul>	<ul style="list-style-type: none"> <li>If arm is behind the baby's head, you may need to rotate baby into occipito posterior position in order to sweep it down in front of baby's face</li> <li>Rotate in the direction it feels you need to in order to release the arm! - Every birth is unique.</li> </ul>

# Upright Breech Birth: When and How to Help

## References

1. Research has associated earlier interventions and more aggressive management of breech presentation with increased neonatal morbidity and mortality. PROMPT lists "Reluctance to allow the breech to descend without intervention" as a common difficulty observed in training drills. They say: **"Limited intervention is key - avoid traction."** (2010)
2. Evans J, 2012. Understanding physiological breech birth. *Essentially MIDIRS* 3(2):17-21.
3. RCOG (2006) The Management of Breech Presentation, Green-top Guideline 20b
4. Reference: Frye A, 2004. *Holistic Midwifery, Vol II*. Portland: Labrys Press.
5. Suprapubic pressure is recommended by RCOG (2006) and PROMPT (2012) in cases of delay of aftercoming head. The midwife should aim to assist rotation off the symphysis pubis.
6. Mauriceau-Cronk is a variation of the Mauriceau-Smellie-Veit manoeuvre recommended by RCOG (2006) and PROMPT (2010), adapted for use when the woman is on all fours.
7. Positions which mimic a squat (thighs abducted) increase the pelvic outlet diameters by 28% (1 cm in transverse, 2 cm antero-posterior). Reference: Russell JGB, 1982. The rationale of primitive delivery positions. *British Journal of Obstetrics and Gynaecology*, 89, pp. 712-715. Additional reference: Reitter, A., Daviss, B.A., Bisits, A., Schollenberger, A., et al. (2014) Does pregnancy and/or shifting positions create more room in a woman`s pelvis? *American journal of obstetrics and gynecology*.
8. Reference: Frye A, 2004. *Holistic Midwifery, Vol II*. Portland: Labrys Press.