Brilliant Activities for Birth Educators: Late Pregnancy Cast of Characters

by Mallory Emerson

Rockstar Baby

I am the star of this show! All of this work our bodies have been doing is to get me growing big and strong. While I've been tucked inside, I can hear your voices, respond to your touch, and am practicing important things like sucking, hiccupping, and swallowing!

My big, heavy head turns down toward the cervix by about 36 weeks so I'm ready to make my debut, but there's still work to do before I'm born. Some things I pick up in the last few weeks of pregnancy: vitamin D, iron, immunities, body fat, brain growth. I'm packing on the ounces so I can rock all the hard work of adjusting to the outside world!

I kick things off when my lungs are ready to breathe. I send a message out to my pal Placenta so we can get this show on the road!

As the uterus pushes me down and the cervix opens to make way, I rotate and tuck my head to find the perfect pelvic pathway.

Fun fact: the stress of labor and birth causes a rush of adrenaline for me, which will help when I need to breathe, heat myself up, and latch onto the breast after I'm born!

The Great & Mighty Uterus

I am the powerhouse around here! Stretching and expanding to hold your growing baby, my muscles are ready to do the hard work of contracting during labor.

When I receive estrogen from the placenta, I begin producing **prostaglandins** for the cervix and become much more sensitive to oxytocin, the love hormone! As the levels of oxytocin rise, I have a job to

do... contract! As labor gets closer, my practice contractions will get more frequent. After lots of practice (which you may or may not notice), I'll get into a nice steady rhythm with contractions that don't go away and get stronger and closer together throughout labor.

Fun Fact: I'm so strong I have two different types of muscles that help open the cervix and move baby down towards birth!

Your Pal Placenta

I'm only around for a short time (just for this pregnancy) but while I'm here I've got a lot of work to do!

For most of the last 40-ish weeks, I have been protecting that little rockstar of yours from germs and bugs and other things they might not want, while letting through the amazing nutrients and oxygen they need to grow.

But things are changing! I just got a message from your baby's lungs...it's go time! I'm going to convert that message into estrogen and send it off to the uterus. I also produce **prostaglandins** to help that stubborn cervix ripen and soften.

I'm also going to let some extra stuff through to baby...they need vitamin D and iron to make up for what's lacking in breast milk those first six months. They also need a good dose of antibodies to protect them a bit before they can build up their own immune systems.

Fun fact: you grow a new placenta with each pregnancy...I'm your body's only disposable organ!

Vagina aka Birth Canal

I'm stretchy! I'm flexible! I'm full of folds and creases that help me expand for baby's passage and then go back to my normal size!

As we get closer to birth, it is normal to notice some spotting in addition to my extra discharge during pregnancy. Call your care provider if you are concerned. The bladder and the rectum are on opposite sides of me, so it is important that you keep them both empty throughout labor!

"Fun" Fact: The **perineum** is the area between the vulva (the external organs surrounding the opening to the vagina) and has a chance of tearing during birth. These tears tend to be minor and don't happen for everyone. There are things you can do during pregnancy and birth to reduce the chance of tearing.

Cervix: The Gatekeeper

Hey! Give me a break and a little privacy, please!

To protect this baby, I grew longer and thicker during pregnancy, so I have to change a whole lot before baby can be born, and it is a tricky business. Your midwife or doctor might poke around to see what I'm up to...I'm not a big fan of all that prodding! I like to do my work in private.

Here's the deal: the prostaglandins from the uterus and placenta help me soften up (**ripen**)...the pressure of that baby's head also starts to thin me out (**efface**). Eventually I'll start to open up (**dilate**), from zero to ten centimeters. Sometimes that change starts to happen in the weeks before birth, but it will usually take lots of laboring to get me to really open up completely.

Fun Fact: for more protection, I shift towards the back of the vagina during pregnancy, but sometime before baby needs to make their exit, I shift to an **anterior** position that points more directly towards the exit ramp.

<u>Umbilical Cord: Would you like to use a lifeline?</u>

Baby needs oxygenated blood full of nutrients (don't we all??). I get it to them! When their heart pumps out the deoxygenated blood, I carry it back to my pal the placenta. It's a smooth-moving system that keeps baby on track.

I'm very strong and am often clamped and cut about 30-60 seconds after birth, but I prefer to finish ALL my work, and get clamped after I stop pulsing. If you are cutting me to detach baby, be prepared to put in some good muscle to get through! Don't get nervous, I've got no nerve endings and no one is hurt. Surrounding the two arteries and one vein inside me is a substance called Wharton's Jelly. The jelly helps protect the arteries and vein throughout pregnancy and birth, but after baby is born it collapses and I flatten out.

Fun Fact: It is possible to delay cord clamping and still donate blood to your looal cord blood bank if you wanted!

Little Miss Mucus Plug

Noticed more mucus (discharge, runny nose, congestion, etc.) lately?? In your cervix, I'm a specific type of mucus that really helps out! I hang out in the opening to the uterus, keeping bacteria away from baby.

As the cervix starts to give way and open up before labor, it's really normal for me to make a quick exit – you might not even notice, but if you see something in your underwear or on your toilet paper that looks like a blood-tinged ball of snot....surprise, that's me!! Take heart, it means some changes are starting to happen and labor will start.... sometime! Maybe soon, maybe a few weeks from now.

Fun Fact: Don't worry, baby is still protected and more friendly mucus plugs will take my place to keep protecting against infection!

Amniotic Sac: More than just a bag of water

I'm connected to the placenta and fully surround that baby of yours, keeping them snug inside. I'm full of **amniotic fluid**, providing a cushion and buffer for baby. With my help, they are safe from bumps, loud noises,

and other things that might disrupt the important work they are doing in there. I also play a role in making sure baby gets all the fluid and nutrients they need to grow, and as that little person practices breathing and swallowing, you'll find me moving through their system getting them ready for birth!

Late in pregnancy and during labor, I become more susceptible to rupturing. When your "water breaks" is variable – sometimes it is the first sign of labor but sometimes I stay intact and strong until you push that baby all the way out! Most commonly, I release my fluid in active labor.

Fun Fact: Baby can taste different compounds in the amniotic fluid as it changes based on what the pregnant person is eating. You can influence baby's palate even before they are born!

Breasts: A Factory, Not a Silo

Noticed any changes the last few months?? Swelling, tenderness, growth and even some discharge of white or pale yellow fluid are all signs that we are getting ready to feed your baby. Don't worry if you haven't noticed these changes...they're happening behind the scenes.

Despite the gossip, we are not storage tanks for milk. Instead, we spend pregnancy bulking up the pieces of a complex milk-making factory. When all of those pieces are prepped and baby is ready, the components are all ready to kick into high gear when baby attaches to the breast at each feeding.

The hormones that move through your body during labor and immediately after the placenta is delivered tell us that we should be ready to feed that baby! **Colostrum** is baby's first food, and that is what we are working on already. It is thick, yellow and produced in small amounts at first to match baby's tiny belly. It is chock full of antibodies and proteins.

Fun Fact: our nipples are awesome! They darken during pregnancy and will act like a high-contrast target for baby in the first hour after birth. We also have tiny bumps in the areola called the **Montgomery Glands**. The

secretion released from these glands will mimic the smell of amniotic fluid right after birth. We want that baby to find us ASAP once they are born!

HORMONES! We run this show!

You've heard a lot about us, but we are the hormones running through your body and baby's body. You might not be able to see us, but we are really making things happen.

Oxytocin: I cause contractions! Contractions make baby move down and open the cervix.

Endorphins: We are the feel-good hormones and balance out the discomfort caused by your oxytocin-fueled contractions. We are your friend!

Adrenaline: I'm the STRESS hormone! Think fight-or-flight...when I'm rushing through the body, oxytocin and endorphins take a nose dive, slowing labor WAY down.