

Informed Consent: Ultrasound & Doppler Use



Pineapple Babies Birth Services

Client Name _____ Client DOB _____

We regularly use a hand held Doppler to auscultate the fetal heartbeat. There is minimal research on the risks vs. benefits of this tool, although it is widely accepted as a safe practice in the medical field. Some research suggests that the fetus can hear a hum like the highest note on a piano or a high decibel sound like a train pulling into the station if the Doppler is pointed directly at the fetal ear. Since we are unable to visualize exactly where the Doppler is pointed this increases the risk of hearing impairment, prematurity, and intrauterine growth restriction (Frye, 2007). Upon request we will use a fetoscope to listen to fetal heart tones. You should understand that the use of the fetoscope poses no risk to the fetus but may not allow auscultation as early in pregnancy as a Doppler. We require use of the Doppler during labor as the fetoscope can take more specific positioning of the mother, pressure on the abdomen that can be very uncomfortable during labor, quiet and more time to locate the fetal heartbeat than may be practical during labor. We may also request use of the Doppler at other times during your care. We will be mindful of your concerns and respectful of your choices at all times.

During pregnancy many women look forward to seeing their baby and possibly finding out the gender by ultrasound. This does not come without potential risks and should be carefully considered prior to choosing this option. While ultrasound like Doppler use is widely accepted as low risk and safe, there are few studies that have been done on the long-term affects of ultrasound during pregnancy. Studies have shown that routine ultrasound scanning on low-risk women do not influence newborn survival rates. Genetic code switching or crossing over, which can cause any number of effects have been confirmed by 5 independent labs (Frye, 2007). Many studies have reported higher rates of underweight newborns, increase of childhood cancers and leukemia, and immune compromise though none of them have been verified or reproduced. The greatest risk for fetal damage is in the early weeks of pregnancy (3-16 weeks gestation) prior to when vital organs are substantially formed (King, Brucker, Kriebs, Fahey, Gegor, & Varney, 2015). Care should be taken to minimize ultrasound exposure to the fetus unless dating or other diagnostics are necessary during that time. While under the care of a midwife long-term exposure, which also increases the possible risk, is not a concern, it is something you should think about in case you should need to transfer care to a physician during your pregnancy or delivery. A few of the possible risks of long-term (continuous monitoring during labor) are: jaundice, changes in brain wave patterns, liver cell changes, blood stasis, delayed postnatal grasp reflex, and increased anxiety and stress in the mother.

We routinely offer an ultrasound between 18-24 weeks gestation called an anatomy scan. This scan gathers the following information: the number of fetuses and information specific to multiple gestations, gestational age, cardiac activity, presentation, placental placement and confirm a three-vessel cord, amniotic fluid volume, all four chambers of the heart and blood flow out of the heart, head and brain development, stomach, kidneys and bladder, neck and spine, arms and legs, fetal weight estimation, and information about the uterus and surrounding structures. It takes about 15-30 minutes and doesn't need any special preparation on your part. We strongly recommend this scan to ensure everything looks normal with the heart and lungs specifically. When delivering out of hospital, diagnosing life-threatening problems prior to labor is a good practice and worth the possible risks.

You may refuse any of the following authorizations: **Please circle yes or no.**

- ❖ I agree to allow Doppler use during each of my prenatal visits to assess the fetal heartbeat. Yes No
- ❖ I agree to allow Doppler use during labor to assess fetal heartbeat and well-being. Yes No
- ❖ I agree to an ultrasound to view fetal anatomy between 15 – 23 weeks gestation. Yes No
- ❖ I agree to other use of ultrasound during the pregnancy as indicated by circumstances and examination. Yes No

I give my permission as indicated above for the duration of my care by Pineapple Babies Birth Services. I further understand that I may change my mind regarding use of ultrasound technologies at anytime during my care with the exception of during labor.

Signature _____ Date _____