## RILEY PARK MATERNITY CLINIC

The Goldie/Zwiers Clinic The Grace Maternal Child Clinic The Low Risk Maternity Clinic The Northwest Maternity Clinic

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Echogenic foci, CPC and Other Ultrasound Confusions



The 18 week ultrasound provides you and your physician with helpful information. With this simple, low intervention test we are able to:

- □ confirm gestational dates
- □ identify twins or triplets
- □ locate the placenta
- □ review fetal anatomy.

The radiologists can also screen for genetic markers.

Reading this pamphlet will help you understand the purpose of identifying genetic markers and what they mean for you and your baby. The few minutes you spend reviewing this information may save you considerable anxiety.

Identifying genetic markers is done automatically according to the College of Physician and Surgeon guidelines. Typical examples of genetic markers are echogenic foci in the baby's heart or choroid plexus cysts (CPCs) in the baby's brain. These appear in many perfectly normal pregnancies and do not indicate problems with the baby's heart or brain. They are associated, however, with a slight increased risk the baby will have Down Syndrome or Trisomy 18.

To keep things in perspective, read the following analogy (which obviously has nothing to do with babies).

Scientists have studied skin cancer and know having red hair is associated with an increased risk of skin cancer.

Does this mean that all red-headed people will get skin cancer?

No.

It is unlikely redheads will get skin cancer because the incidence of skin cancer is much lower than the incidence of red hair. In this analogy, red hair is the marker. Obviously, having red hair is not problematic by itself, but redheads are slightly higher risk of getting skin cancer than a black, brown, or blond-haired person.

The echogenic foci, choroid plexus cysts and other genetic markers are like the red hair in the analogy. The markers pose no danger to the baby, but do indicate a slightly increased risk of a genetic problem. The chance the baby will have a genetic problem is unlikely because genetic problems are rare, and genetic markers are normal and found frequently. In fact, echogenic foci are so common in people of South Asian origin that it is questionable if they are even a marker in the population.

So, why do the radiologists look for these markers? By identifying markers on ultrasound, women at a slightly increased risk can decide if they wish to have a more invasive procedure to check the baby's chromosomes.

If you have an ultrasound and genetic markers are identified, there is test called an amniocentesis which diagnoses or refutes possible genetic problems accurately. Unfortunately, amniocentesis is an invasive test and carries a 1/200 risk of causing miscarriage or growth abnormalities in the baby.

It is important to remember that you have a series of choices to make in relation to the 18 week ultrasound.

You may choose not to have an 18 week ultrasound, but then you will miss out on the other information it can provide.

If you have the ultrasound, you can choose to have your physician not report genetic markers to you. You need to inform us and have this clearly indicated on your prenatal records prior to attending your 18 week ultrasound.

If genetic markers are identified and reported, you will be asked to come in to discuss the results and review your options.

A large number of patients choose not to do any more testing because their baby is still very likely to be genetically normal. This is especially true when a patient has had a reassuring first trimester screen/nuchal translucency. In addition, some patients choose not to have further testing because they would not change how they manage the pregnancy.

For others, they may choose to have an amniocentesis. If amniocentesis shows the baby has a serious genetic abnormality such as Down Syndrome, you do have the option to terminate the pregnancy up to 23 weeks.

If you are uncertain whether or not you would like an amniocentesis, we will have you meet with a genetic counselor to give you more information, and help you make this decision.

In every instance, the choice is yours.

We hope this pamphlet clarifies a confusing situation and alleviates some anxiety about your 18 week ultrasound.

## A note on sex determination...

If you would like to know the sex of your baby, you may request this at the time of your scan from the technician. If they are able to see the sex, they will let you know. Please note sex determination is not 100% accurate. The sex of

the baby is never included in the official radiologist's report. Therefore your doctor will not be aware of your baby's sex unless you choose to inform them.

The Society of Obstetricians and Gynecologists of Canada have recommended that ultrasounds in pregnancy be restricted to those required for medical reasons only. We do not send patient's for ultrasounds that are ONLY intended to tell the gender of the baby. There exist a few companies in Calgary who will perform "self pay" ultrasounds for this purpose. Please ask your care provider for further information if required, or check the references section in your From Here Through Maternity Book.