

1st TRIMESTER PRENATAL SCREENING - PHYSICIAN'S GUIDE

According to SOGC recommendations, all pregnant women in Canada, regardless of age, should be offered through an informed counselling process the option of a prenatal screening test. As per SOGC and CCMG guidelines, any prenatal screening option offered in the first trimester should have at minimum a 75% detection rate and 3% false positive rate. The province of Saskatchewan has developed a first trimester integrated screening option for patient to meet these minimum standards.

WHAT DOES A COMBINED FIRST TRIMESTER SCREENING TEST INVOLVE?

Blood testing: to measure the the level of pregnancy-related hormones, such as PAPP-A and HCG, in the mother's blood.

Nuchal Translucency: using ultrasound to measure the thickness of the skin at the back of the fetus's neck.

WHAT STEPS SHOULD I TAKE WHEN ORDERING A COMBINED FIRST TRIMESTER SCREENING TEST?

- The patient should be referred for an **8 week dating** ultrasound to establish an accurate EDC.
- Once an EDC has been established, the patient should be referred for a **Nuchal Translucency** ultrasound.
- Once a referral is received, our staff will contact the patient to book their Nuchal Translucency ultrasound between **11w0d-13w6d** gestation.

To streamline this process, The Ultrasound Centre requisition includes an option for **Dating/NT/Detailed**. By selection this option, our staff will arrange all three obstetrical exams within the appropriate timeframe.

DO I NEED TO SEND MY PATIENT FOR SCREENING BLOOD WORK?

NO - If the Nuchal Translucency scan is successful, our sonographer will provide your patient with a **Maternal Serum Screen** blood lab request following their appointment.

Please Note: The provincial lab requests that 1st trimester blood work be done only **once**. If your patient has had 1st Trimester Screening bloodwork **after 10w6d and within one week** of their appointment, an additional blood lab request will not be provided.



WHAT CRITERIA MUST BE MET FOR THE NUCHAL TRANSLUCENCY (NT) SCAN?

The NT scan is time sensitive. The Fetal Crown Rump Length (CRL) **must** measure between **45 mm-79.2 mm**, to qualify for the NT Scan. Measurements falling outside of these parameters will yield an **invalid** result, and the NT Scan **cannot** be completed. The position and visualization of the NT must meet the criteria and protocol outlined by the Fetal Medicine Foundation (FMF). The NT scan will be performed by an experienced Sonographer who holds an active FMF Nuchal Translucency Certificate.

WHAT HAPPENS IF AN ACCURATE NT MEASUREMENT IS NOT POSSIBLE?

If the Sonographer is unable to obtain an accurate NT measurement during our first attempt, we will rebook your patient for a short term follow up exam. If subsequent attempts are still not satisfactory, (due to factors such as fetal lie, maternal habitus or CRL falling outside of the threshold) the combined first trimester screening test unfortunately cannot be completed.

WHEN SHOULD I EXPECT THE RESULTS?

The ultrasound results portion of the screen will be available within 1-2 business days. The complete risk assessment results may take up to one week to finalize.

ACCURACY AND RISK ASSESSMENT INTERPRETATION

- The blood test results, when combined with the nuchal translucency has a sensitivity between 82-87% with a false positive rate between 3-5%.
- Adding maternal age (MA) to this integrated test results in an 85-90% sensitivity and 3% false positive rate meeting SOGC and CCMG standards.
- By comparison, first trimester maternal serum biochemistry at 15-18 weeks + MA has a sensitivity of 50-70% and a false positive rate of >5% which does not meet the minimum standards outlined by the SOGC and CCMG for first trimester screening.

ADDITIONAL INFORMATION

SOGC prepared patient information is included with this letter. The SOGC physician guidelines can be found here:

https://ccmg-ccgm.org/wp-content/uploads/2022/04/SOGC_update_on_prenatal_screening_2017.pdf

Please reach out! A member of our team would be happy to answer any additional questions you have about referring your patients for First Trimester Prenatal Screening. **www.theultrasoundcenter.com**