First Trimester Screening and Its Impact on Uptake Diagnostic Testing

Deanna R. Darnes

Supervisory Professor: Jennifer L. Czerwinski, MS, CGC

Introduction:
First Trimester Screening (FTS) combines maternal age with fetal nuchal translucency (NT) and maternal analytes to identify pregnancies at an increased risk for Down syndrome and trisomy 18. Though the accuracy of this screening is high, it cannot replace the conclusive accuracy of prenatal diagnostic testing (PDT). Since FTS has been available, a decrease in the number of women who pursue PDT has been observed. This study sought to determine if there has been a significant change in the amount of PDT performed in our clinics, if the type of FTS result affects the patient’s decision regarding PDT, and what the patient’s intentions are regarding PDT.

Material and Methods:
A database review was performed for the two years prior and the two years after the January 2007 American College of Obstetricians and Gynecologists (ACOG) guidelines regarding FTS were issued. We compared the number of women who were AMA and the number of women who were AMA and had PDT between those time periods. We also determined the number of positive and negative FTS results, and determined how many of those patients had PDT. Finally, we surveyed our patients and referring physicians to determine: what the patient understands about FTS, what the patient’s intentions are regarding FTS, and how physicians present the option of FTS to their patients.

Results:
We determined that there was a 19.6% decrease in the amount of PDT performed when we compared the two time periods at our three specified clinics. Many of our patients were against having PDT prior to their genetic counseling session, but after they received genetic counseling, 76% of our population became open to the possibility of having PDT.

Conclusion:
Similar to previous studies, we determined that there has been a significant decrease in the number of PDT procedures performed at our clinics, which coincides with the release of the January 2007 ACOG statement regarding FTS. While our patients regarded FTS as a way to gain early information about their pregnancy in a non-invasive manner, they also stated they would use their results as a way to aid in their decision regarding PDT.