The purpose of this study was to assess anxiety associated with various indications for genetic counseling and prenatal testing, and use this information to enhance the genetic counseling process and provide a better understanding of patients’ anxiety. No previous study has compared anxiety levels between women referred for advanced maternal age (AMA), abnormal maternal serum screen results, and detected soft ultrasound findings. Soft ultrasound findings including nuchal thickening, choroids plexus cysts, echogenic bowel, shortened long bones, echogenic intracardiac foci, fetal pyelectasis, mild ventriculomegaly, and single umbilical artery may indicate an increased risk for fetal aneuploidy. The significance of soft ultrasound findings is unclear and the option of prenatal diagnosis for these patients is controversial. These three groups of women have similar statistical risks, but no studies have investigated whether this similar risk confers similar anxiety levels.

The State-Trait Anxiety Inventory was used to assess the women’s anxiety levels post-genetic counseling and an additional questionnaire was used to obtain demographic information and assess perceived risk. Two hundred fifteen women participated in the study: 124 AMA, 55 abnormal maternal serum screens, and 36 soft ultrasound findings.

Our findings revealed that women with soft ultrasound findings and abnormal maternal serum screens had significantly higher state anxiety than women who are AMA.
These findings are consistent with other studies that have reported higher state anxiety levels in women with abnormal MSAFP testing compared to women who are AMA. Although women with soft ultrasound findings are given less clear and often controversial information, their state anxiety was not significantly different from women with abnormal maternal serum screens. Perceived risk, decision to undergo amniocentesis, education level, and income were factors that significantly affected the women’s anxiety scores. However, none of these factors proved to be successful indicators of state or trait anxiety.

We conclude that referral indication is associated with different levels of anxiety opposed to the actual numerical risk for chromosome abnormalities that is presented during the session. With increased prenatal screening and genetic testing options, it is important to understand the psychosocial implications for patients and further research is warranted in this area.