The purpose of this pilot study was to determine how abnormal second trimester maternal serum screen results are disclosed, the anxiety level of patients referred for an abnormal serum screen based on how their results were revealed to them, as well as the accuracy of their risk perception. While several studies have reported an increased level of anxiety in women referred for an abnormal serum screen, no studies, to our knowledge, have determined whether or not the method of results disclosure correlates with anxiety levels and/or risk perception of the patient. Second trimester maternal serum screening is in place to identify women at an increased risk of having a child with an open neural tube defect (ONTD), Down syndrome, or trisomy 18. All women referred for a genetic counseling appointment for any indication at several Houston area clinics were asked to complete a questionnaire to obtain demographic and results disclosure information as well as assess perceived risk. Each participant was asked to complete a six-item state Anxiety Inventory from which an anxiety level was determined. Of the 561 questionnaires distributed, 388 (69.3%) women chose to participate. Of the 137 participants referred for an abnormal serum screen result, 125 (91.2%) were aware of this indication and elected to complete the results disclosure portion of the questionnaire. The majority of women were informed of their result on the phone or in person and by a nurse or obstetrician. Unexpectedly, the average anxiety level was not significantly different depending on how a woman was informed or by whom she was informed. Of the 16 (12.8%) participants who indicated what they thought to be their numerical risk, 10 (62.5%) were able to accurately indicate their risk. This study confirmed an increased level of anxiety in women referred for an abnormal maternal serum screen compared to other indications such as advanced maternal age but did not identify a method of results disclosure that affected the resulting anxiety. Additional studies to
identify risk factors for increased maternal anxiety in women referred for an abnormal second trimester serum screen are warranted.