Objective: Try to find out the frequency of isolated fetal pyelectasis and its association with abnormal fetal karyotypes in a high risk pregnant population. Material and Methods: 759 pregnant women with advanced maternal age or with increased risk for trisomy 21 in triple tests were enrolled into the study. Ultrasonographic examinations and amniocentesis were performed for all pregnant women at 15-21 weeks of their gestations. Results: 649 women completed the study protocol. 424 cases had advanced maternal age and 225 cases had increased risk for trisomy 21. There were 15 cases (2.31%) with isolated pyelectasis and these cases had normal karyotypes except a normal variance (46,XX,inv9p11q13). There were 14 (3.30%) chromosomal abnormalities in advanced maternal age group and 7 (3.11%) in pregnant women with increased risk in triple tests. Conclusion: Although increased risk of Down’s Syndrome is not high in pregnant women with isolated fetal pyelectasis, they should be followed and searched for other findings of aneuploidy.