Re: Procedure-related risk of miscarriage following amniocentesis and chorionic villus sampling in Larissa University Hospital

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Introduction
To estimate procedure-related risks of miscarriage following amniocentesis and chorionic villus sampling (CVS) in Larissa University Hospital Fetal Medicine Unit and to compare it with the fetal loss risk in our hospital and also with the general accepted risk for those procedures based on a review of the literature.

Methods
Our study group consists of 335 singleton and 7 twin pregnancies with consecutive amniocenteses and another group 218 singleton and 4 twin pregnancies with consecutive CVS performed in our Fetal medicine Unit in Larissa University hospital fetal medicine unit during a 3-year period (2012-2015) with known pregnancy outcome. We compare these groups with the risk of miscarriage in a group of 5638 pregnancies who has been recorded to our hospital during the same period that did not have any invasive test. The two groups were compared in terms of fetal loss rate up to 24 weeks.

Results
The risk of miscarriage prior to 24 weeks in women who underwent amniocentesis and CVS was 0.87% and 0.45%, respectively. The background rates of miscarriage in women from the control group that did not undergo any procedures were 0.67%.

Conclusions
Our study has shown that the risk of miscarriage that can be attributed to invasive procedures in our unit is not statistically significant when compared with cases without any invasive procedure during pregnancy. The procedure-related risks of miscarriage following amniocentesis and CVS are much lower than are currently quoted in the literature (1% risk of miscarriage).