Introduction:
Amniotic fluid plays a vital role in fetal wellbeing. The amount and the source of (AF) vary with the gestational age. AF contains growth factors and anti–microbial material, both are vital for normal growth and wellbeing of the fetus. AF allows fetal pulmonary expansion and it act as a cushion to the fetus and the umbilical cord. Consequently anhydramnios or severe oligohydramnios can have a significant adverse impact on the fetus.

Objective
The purpose of this study is to evaluate the role of transabdominal amnioinfusion in the management of pregnancies complicated by severe oligohydramnios.

Methods
The study consisted of a prospective analysis of 80 pregnant women presenting with oligohydramnios who were treated with amnioinfusion during pregnancy in a period from 2003-2018.

Results
The mean gestational age at presentation was 24 weeks. The mean pre-procedure deepest pool of amniotic fluid was 1.8cm and post-procedure was 3.8cm. The mean number of infusions was 1.05. The mean first infusion to delivery interval was 31 days. The initial diagnosis was changed in 40% of cases after amnioinfusion (see figure 1). Perinatal mortality was 48% and neonatal mortality was 25%. There were 3 cases of chorioamnionitis, with one of these cases presenting with premature rupture of the membranes (PROM) at the time of amnioinfusion.

Conclusion
This study proved that Tran-abdominal amnioinfusion is technically easy for fetal medicine specialists who perform intrauterine invasive procedure on a regular basis. The majorities of patients in this study have high BMI and repeated Caesarean deliveries and in the presence of oligohydramnios, visualization of fetal anatomy was extremely difficult. The main advantage shown by this study is the establishment of the final diagnosis after amnioinfusion (See figure1). This was critical to avoid Caesarean delivery when a major fetal malformation was confirmed. Although the results show a high perinatal mortality, it must be borne in mind that most of these pregnancies had multiple fetal abnormalities with an already predicted poor outcome. This procedure increases the latency period and prolong the pregnancy. This is likely to improve the perinatal outcome.

Figure one: Transabdominal amnioinfusion using normal saline