Objective
Many factors are related with terotogenity of valproic acid like drug dosage, differences in maternal and/or infant metabolism, the gestational age of the fetus at exposure, and hereditary susceptibility. In the current report, we aimed to present a term pregnancy with one of the fetus had neural tube defect in triamniotic monochorionic with valproic acid use from the first trimester till the end of the pregnancy.

Methods
Case report.

Results
A 20 year old, epileptic nulliparous woman (G: 1 P: 0) applied to our clinic at 12 weeks of gestation. Triplet pregnancy with triamionic-monochorionic plasentation was diagnosed. Patient has used 500mg valproic acid twice daily from the beginning of the pregnancy. She was informed about anatomic defects like neural tube defect and cardiac pathologies associated with valproic acid. During second trimester anatomic screening, meningomyelocel was detected in one of the fetus and two others were normal. There was no other obstetric complication during the pregnancy follow up. Patient applied to labor unit at 31 +4 gestational week with contractions and spontaneous rupture of membranes. 1035gr, 1215gr and 1300 gr female babies were born. After delivery, antenatal diagnosis of lumbar meningomyelocele was confirmed in the 1035gr baby. Placenta was sent for pathologic examination and triamniotic monochorionic diagnosis was also confirmed.

Conclusion
Although the co-administered drugs, drug dosage, differences in maternal metabolism, the gestational age of the fetus at exposure, and hereditary susceptibility are related with terotogenity of valproic acid, placental transfer and fetal metabolism are also important. In our case, also all the conditions were similar for fetuses, only one had terotogenic effect. This could be related with the different metabolisms and placental transfer between fetuses even they were monochorionic.