### Introduction
Measurement of maternal serum alpha-fetoprotein levels (MSAFP) used for screening and detection of neural tube defects (NTDs). If the AFP level was elevated 2.5 multiples of median (MoM), targeted ultrasonography and amniotic AFP should be considered. Acetylcholinesterase (AChE) levels are measured if AF-AFP levels are abnormally high (2.0 MOM). But MSAFP is associated with different cases including twins, fetal death, other anomalies. And the false positive rate of the AF-AFP is high, and there is 0.3% of the false positive rate in amniotic acetylcholinesterase. We report a case with elevated AF-AFP and positive amniotic acetylcholinesterase, but in which repeated sonographic findings were normal and result in delivery of a healthy baby without anomalies.

### Case
A 32 years old (para 2-0-1-2) women with monochorionic diamnionic twin visited the hospital, because of abnormal result of integrated test at 17 + 4 weeks. F1 was 1: 18 in Down syndrome high risk, F2 was 1: 280 high risk and MS-AFP was in a normal range of 105.14 ng/mL (1.28 MoM). The test was performed at 15+ 6 weeks of gestation and there was no abnormality in the fetuses at the time of ultrasonography. At the time of the visit to the hospital, fetal death in utero of one twin was found and Amniocentesis was conducted due to further evaluation of integrated test. Chromosomal assay was normal, but elevated AF- AFP (109,000 ng/mL, 11.03 MoM) and positive acetylcholinesterase (AChE) in amniotic fluid were found. but in which repeated ultrasonographic findings were normal, and she delivered a healthy baby without anomalies at 39+ 6 weeks.

### Conclusion
Elevated AFP levels and the presence of an AChE in amniotic fluid had been reported to occur several weeks following intrauterine fetal demise (IUFD) of one twin. Fetal demise and bleeding into the amniotic sac are regarded as continuing sources of elevation of AFP. Although AFP and AChE are very important role in the screening and diagnosis of neural tube defect, caution should be exercised in the case of one fetal demise in twin.