



Prediction of adverse prenatal outcome: screening by maternal serum AFP at 11–13 weeks

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Objective

To investigate the value of maternal serum concentrations of alpha-fetoprotein (AFP) at 11+0-13+6 weeks of gestation, in combination with maternal factors in prediction of adverse prenatal outcome.

Methods

In the 452 singleton pregnancies screened, 37 (8,2%) had delivery before 34 weeks, 9 (1,9%) were complicated by intrauterine fetal death (IUFD) and 45 (9,9%) developed preeclampsia (PE). The mean value of AFP were compared between the normal pregnancies and those with adverse outcomes. AFP were reported as multiples of the median (MoM).

Results

Mean MoM value of AFP were higher at 11+0-13+6 weeks in pregnancies with preterm delivery < 34 weeks (14,4918,26 vs 22,1223,28; $p=0,04$), PE (14,1210,15 vs 24,1250,82, $p=0,001$) and IUFD (14,3410,02 vs 53,46112,79; $p<0.001$).

Conclusion

AFP could prove an useful marker in the screening for pregnancies complications in the first trimester.