Effect of aspirin in the prevention of adverse pregnancy outcome in women
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Objective
To evaluate the effect of low-dose aspirin in prevention of adverse pregnancy outcomes (APO) in women with second trimester alpha-fetoprotein (AFP)>2.5 multiple of median (MOM) and to compare aspirin effect on women with normal and abnormal uterine artery (UtA) Doppler. The primary outcome was adverse pregnancy outcome.

Methods
An unblinded randomised controlled trial was conducted in singleton pregnant women, who had unexplained AFP>2.5 MoMs and gestational age between 15 and 18 weeks of gestation. They were assigned randomly to receive either aspirin (N=65) or no aspirin (control) (N=68). Uterine Artery (UtA) doppler velocimetry studies were performed at the time of targeted ultrasonographic exam.

Results
Two groups were comparable with regards to maternal characteristics. The frequency of APO in aspirin and control groups were 26.1% versus 44.1% (p=0.045). The frequency of preterm delivery before 34 weeks were 3.2% versus 22.0% in aspirin and control group, p=0.001. Other outcomes were similar in both groups. The frequency of adverse outcomes in women with abnormal UtA Doppler was 39.1% in aspirin and 60.0% in control group, p=0.556.

Conclusion
Low-dose aspirin reduces APO and delivery before 34 weeks of gestation in pregnant women with unexplained elevated AFP at 15 - 18 weeks gestation.