

Umbilical vein blood flow volume in dichorionic twin pregnancy

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Objective. Uncomplicated dichorionic twin pregnancies (DCp) may present a slowdown in the growth trajectory usually occurring in the third trimester. The mechanisms underlying this phenomenon and whether it represents a stunted growth or benign physiological adaptation are currently unclear. The aim of the study is to evaluate the umbilical vein blood flow volume (UVQ) in DCp exploring whether growth slowing is associated with reduced blood supply.

Materials and Methods. Women with DCp were enrolled at 20 weeks and evaluated every 4 weeks. UVQ was calculated and compared with that of a local cohort of 255 uncomplicated singleton appropriate for gestational age (AGA) pregnancies. DCp group was further divided into complicated and un-

complicated pregnancies based on the presence of foetal growth restriction and/or intrauterine death.

Results. 100 patients were enrolled, of whom 17 complicated. UVQ, both absolute and normalized for estimated foetal weight, was found to be reduced in the uncomplicated DCp compared to AGA population [39 (IQR 34 - 51) and 188 ml/min (IQR 127-231) at 20 and 36 weeks *versus* 51 (IQR 43-67) and 265 ml/min (221-319), respectively; $p = 0.05$]. No further reduction in UVQ values was found in complicated DCp, compared with uncomplicated ones.

Conclusions. Our data suggest that UVQ is reduced in uncomplicated DCp, thus, suggesting that reduced foetal growth might be an expression of stunted foetal growth.