Selective fetal reduction in multiple pregnancies: 173 cases in a single center

JY Wang, M Chen, N Li, W Jian, ZH Li, JS Chen, DY Cao, DJ Chen

The Third Affiliated Hospital of Guangzhou Medical University, Guangzhou, China

Objective
To evaluate the perinatal outcome of multiple pregnancies after selective fetal reduction.

Methods
A total of 173 cases of selective reduction were performed either by transabdominal injection of potassium chloride (KCL) into fetal heart or radiofrequency ablation (RFA) during January 2012 to July 2014 in one single center in China. The clinic data was collected to review the perinatal outcome after reduction.

Results
The overall survival rate was 84% after reduction. 121 cases of fetal reduction were performed by KCI: the miscarriage rate in first trimester was 9.5%, which was lower than that in second trimester. 11.5%, there was no statistically significant differences (P>0.05). For reduction to singletons vs twins, the mean gestational age at delivery was almost 2 weeks later in singletons, and birth weights also greater (P<0.01). 52 cases were performed by RFA and the survival rate was 71.2%. Indications for TTTS, sIUGR, TRAPs and structural or genetic abnormalities have different survival rate, which were 68.2%, 83.3%, 100% and 53.8%, respectively, and there was statistically significant differences between TTTS and sIUGR (P<0.01).

Conclusion
Different chorionic multiple pregnancies use different ways of selective fetal reduction. Transabdominal of KCI reduction is preferred in first trimester and the perinatal outcome seems better when reduced to singletons. RFA is performed in monochorionic twins; indication for sIUGR and TRAPs have the higher survival rate than TTTS and structural or genetic abnormalities in twins.