불임 환자군에서 Group-II의 임신률이 Group-I 보다 높게 나타났다 (31.1% vs 19.6%, p<0.05).

**결 론**: 본 연구 결과로 보아 전핵시기에 동결된 수정란의 경우, 융해 이후 단계적 배양액을 사용하였을 때 양질의 배아를 얻을 수 있었으며, 이를 통해 임신율의 향상을 기대할 수 있을 것으로 사료된다.

## O-22 Factors Affecting the Outcome of Pregnancy Following Multifetal Pregnancy Reduction

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**Objective:** With the wide application of ART, multiple pregnancy rate has been increased. Multifetal pregnancy reduction (MFPR) is considered to be useful in improving the outcome of high-order multiple pregnancy. However, factors influencing the outcome are not established well. The specific aim of this study was to identify the factors affecting the pregnancy outcome following MFPR.

Design: Retrospective clinical study.

Materials/Methods: A total of 256 consecutive treatments of MFPR performed between 1992 through 2000 in one center were analyzed. MFPR was done around 8 weeks of gestation by transvaginal ultrasonoguided aspiration in multiple pregnancies and reduced to singleton or twins. Stepwise multiple logistic regression was performed to identify the factors affecting the final outcome of pregnancy after MFPR. Dependent variable was total pregnancy loss and the independent variables were maternal age, paternal age, initial number of gestational sac (iGSNO), initial number of fetal heart beat, number of live fetus after MFPR (remaining fetus), monochorionicity.

Results: The total survival rate and total fetal loss rate after MFPR were 87.8% (225/256) and 12.1% (31/256), respectively. Total pregnancy loss occurred within four weeks from MFPR procedure was 3.5%. Total loss occurred after four weeks of procedure and before 24 weeks were 5.5%. Seventy nine percent (202/256) of pregnancies delivered after 34 weeks of gestation. The survival rate of pregnancies reduced to singleton was significantly higher than that in reduced to twins (93.5% (43/46) vs 86.7% (182/210), p<0.05). The overall mean ( $\pm$  SEM) gestational age at delivery was  $34.1\pm0.5$  and  $36.2\pm1.0$  weeks for pregnancies reduced to twins and singletons, respectively (p=0.065). Logistic regression analysis revealed that the maternal age, the number of initial gestational sac (iGSNO), initial number of fetal heart beat and the number of live fetus after MFPR (remaining fetus) significantly affected (p<0.05) the rate of total pregnancy loss (Z = 0.174\*age + 0.596\*iGSNO + 1.324\*remaining fetuses -12.07).

Conclusions: MFPR seems to be the relatively safe and efficient method to improve the outcome of multiple pregnancy. Because the maternal age, the initial number of gestational sac and the live fetuses remaining after MFPR affect the total pregnancy loss rate, the restriction of the number of transferred embryos according to the age and MFPR to singleton fetus could be considered for the better outcome of IVF pregnancy.