

Selective reduction in multifetal pregnancies with pre-viable preterm premature rupture of membranes

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Objectives

To report the outcome of **selective reduction(SR)** in multichorionic multiple gestations with **pre-viable preterm premature rupture of membranes(PV-PROM)** of the lower gestational sac.

Methods

- Retrospective case series
- Case selection: all cases of multifetal pregnancies where PV-PROM had occurred and where selective feticide was performed from November 2015 to March 2020 in Keimyung University Dongsan hospital.
- **Rupture of membranes** was determined based on the clinician's assessment of **physical findings** and with confirmation of **oligohydramnios on ultrasound**.
- All procedures were performed under ultrasound guidance using **intracardiac potassium chloride (KCL)** and 22 gauge spinal needles.

Result

Case 1. 34 years old, G2 P0
Known HTN

GA 19/5wks vaginal bleeding & gross leakage
USG: 1st baby oligohydroamnios
P/Ex: Cx 2finger 80% effaced

GA 20/0wks Emergency cerclage op & **selective reduction**

GA 22/3wks chorioamnionitis

-> cerclage stitch off & 1st baby(IUFD) out
re-cerclage op

GA 24/2wks C-sec d/t chorioamnionitis & preterm labor pain

Fetus : Female, 620g, Apgar 4/7

Case 2. 29 years old, G1 P0

Triplet DCDA – 1st & 2nd MCMA

GA 15/5wks leakage sensation

USG: 1st & 2nd baby oligohydroamnios

GA 17/1wks 1st & 2nd baby **selective reduction**

GA 20/3wks discharge

GA 34/5wks Vaginal delivery d/t pPROM

Fetus : Female, 2380g, Apgar 8/9

Case 3. 33 years old, G3 P3
Known Type2 DM

GA 21/2wks gross leakage,
USG: 1st baby oligohydroamnios

GA 23/1wks selective reduction

GA 24/4 discharge

-> RTC f/u & observation

GA 37/0 C-sec

Fetus : Female, 3380g, Apgar 8/9

Case 4. 35 years old, G0 P0
s/p IUI

GA 19/6wks gross leakage

GA 20/3wks selective reduction

GA 23/1wks discharge

GA 28/3wks preterm labor pain

-> tocolytics apply

GA 30/1wks Vaginal delivery

Fetus : Female, 1560g, Apgar 7/8

Case 5. 34 years old, G1 P0
s/p IVF-ET

GA 13/1wks leakage sensation

USG: 1st baby oligohydroamnios

GA 14/6wks selective reduction

GA 16/5wks discharge

-> RTC f/u & observation

GA 34/5wks LMC refer d/t patient wanted

- There were four cases of SR of PV-PROM in dichorionic diamniotic twin, and one case in dichorionic triamniotic triplet.
- The mean gestational age(GA) at PV-PROM was 18 weeks.
- The average time from PV-PROM to SR was 7.6 days.
- The mean GA of delivery was 33.9 weeks with a mean latency of 112.4 days.
- Chorioamnionitis and preterm labor were developed in one case.
- Except for one case, the patients were discharged on average 16.3 days after the procedure, and they were followed up without any problems at the outpatient clinic.

Conclusion

preventing
the production of amniotic fluid
in the lower fetus

Selective reduction
of PV-PROM



Occurrence of chorioamnionitis ↓
Latency from PV-PROM to delivery ↑