

SELECTIVE FETICIDE IN DICHORIONIC TWIN PREGNANCY AT A TERTIARY CARE HOSPITAL

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INTRODUCTION

Dichorionic (DC) twin pregnancies have been linked to a two-fold increase in the risk of fetal anomalies. Discordant fetal anomalies management in DC twins can be challenging and selective feticide (SF) is an option. However, SF is associated with a pregnancy loss rate of 7% and increased risk of preterm birth. **Unfortunately, data regarding optimal gestational age and best approach for SF in DC twin pregnancies is currently insufficient.**

OBJECTIVE

Describe **procedure-related fetal loss rate and obstetrical outcomes** after SF in DC twin pregnancy in a tertiary care hospital.

METHODS

Analysis of **sociodemographic characteristics, procedure-related fetal loss and obstetrical outcomes** in all cases of SF in DC twin pregnancy at Obstetric department of Centro Hospitalar Universitário de São João, Oporto, since 2012.

RESULTS

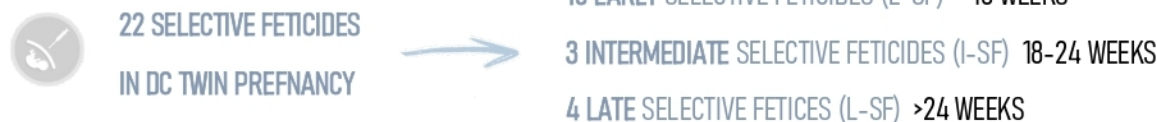


TABLE 1. Sociodemographic characteristics according to timing of SF

Maternal characteristics	E-SF (n= 15)	I-SF (n= 3)	L-SF (n= 4)
Maternal age	36.5±3.6	30.3±2.6	30.5±5.4
Nulliparous	11	1	3
ART	8	1	1
- IVF	3	-	-
- ICSI	4	-	1
- FET	1	-	-
- OS	-	1	-
Previous PTB	0	0	0

Data are given as mean ± SD or n (%). ART, assisted reproductive technology; PTB, preterm birth; IVF, in vitro fertilization; ICSI, intracytoplasmic sperm injection; FET, frozen embryo transfer; OS - ovarian stimulation.

TABLE 2. Indications for selective termination according to timing of SF

Indication	E-SF (n= 15)	I-SF (n= 3)	L-SF (n= 4)
Genetic			
- Trisomy 21	6	-	1
- Trisomy 18	2	-	-
- Trisomy 13	1	-	-
- 45 XO	1	-	-
- Others*	-	1	-
Structural			
- Heart defect	1	-	3
- CNS defect	1	2	-
- NTD	2	-	-
- Skeletal dysplasia	1	-	-

Data are given as n (%). *Chromosome 9q duplication and 10q deletion. CNS, central nervous system; NTD, neural tube defects.

TABLE 3. Procedure-related characteristics and outcomes according to timing of SF

Procedure-related characteristics/outcomes	E-SF (n= 15)	I-SF (n= 3)	L-SF (n= 4)
Invasive diagnostic procedures	13	2	4
Antenatal corticosteroids	-	-	4
Median GA at procedure	16w+0d	20w+1d	31w+6d
Selective termination			
- Presenting twin	6	2	4
- Non-presenting twin	9	1	-
Early complications*	1	0	0
- Infection	1	-	-
- Pregnancy loss	-	-	-
- PV-PROM	-	-	-

Data are given as mean or n (%). GA, gestational age; *until 3 weeks after SF; PV-PROM, periviable premature rupture of membranes; w, weeks; d, days.

TABLE 4. Pregnancy and neonatal outcomes according to timing of SF

Outcomes	E-SF (n= 15)	I-SF (n= 3)	L-SF (n= 4)
Term delivery	11	2	0
Preterm delivery	1*	1	4 [#]
Medical termination of pregnancy	3	0	0
- PV-PROM ¹	2	-	-
- Early severe - FGR ²	1	-	-

Data are given as n (%). PV-PROM, periviable premature rupture of membranes; FGR, fetal growth restriction

¹ >5 weeks after the SF: one at 22w+1d after a suspect chorioamnionitis and other at 21w+6d after delayed-interval delivery;

² Diagnosis of early severe FGR, 5 weeks after SF.

* Delayed-interval delivery at 30w+6d

[#] 1-3 weeks after SF

CONCLUSION

SF can be a viable approach to manage DC twin pregnancies that have discordant anomalies. However, it can lead to adverse perinatal outcomes, including the pregnancy loss of the other fetus and high risk of preterm birth.