Pregnancy Outcomes following Selective fetal reduction in Multifetal gestation.

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Introduction:
The rate of triplet and higher-order multiple gestations have increased dramatically after the widespread use of assisted reproductive technology (eg, in vitro fertilization, ovulation induction) and increasing maternal age at conception. Higher order multifetal gestations are at higher risk of maternal, fetal, and neonatal complications than singleton or twin pregnancy. Higher-order multiple gestations are associated with significantly increased risks of perinatal morbidity due to preterm labour, growth restriction and increased maternal morbidities like GDM, HT in pregnancy, abruption. Selective fetal reduction improves the perinatal outcome in higher order multiple pregnancy and twins pregnancies with discordant anomalies.

Objective:
To evaluate the pregnancy outcomes after selective fetal reduction in multiple pregnancy with (higher order multiples) and those with discordant fetal anomalies.

Materials & Methods:
Study population - 86 women who underwent selective fetal reduction at Rainbow hospitals, Hyderabad, India.
Retrospective analysis
Demographic characteristics
Pregnancy characteristics:
- Method of conception.
- Chorionicity
- Gestational age at procedure
- Indication of selective feticide & duration of procedure
- Method of selective feticide - Injection KCL
- Number of fetuses underwent feticide
Perinatal outcome measures:
- Total pregnancy loss of SFR
- Gestational weeks at delivery
- Birth weight of Neonates
- Neonatal APGAR score, duration of NICU admission.

The duration of procedure got reduced and the results got better over period of time with positive learning curve.

Conclusion:
- Embryo fetal reduction can be a preferred option in case of management of higher order multiples and discordant fetal anomalies, which improves the perinatal outcome.
- There is no significant increase in loss with gestational age or number of fetuses reduced.
- Hence we believe that SFR in triplet pregnancies around 12-13 weeks of gestation may allow the detection of more fetal abnormalities without an increased risk of miscarriage.
- Our learning curve shows better perinatal results.

Results:
Out of 86 cases of multiple pregnancy who underwent selective fetal reduction 80 were confirmed their pregnancy outcomes and 6 were lost for follow up. Procedure done after NT assessment at 12-13 weeks and after exclusion of major fetal abnormalities. All the cases were investigated to exclude maternal infection.

- Pregnancy loss rate before 16 weeks - 12.5% (10/80)
- Another 5% loss before 20 weeks - (4/80)
- Of the remaining cases, (66 cases) 80% of the cases continued beyond 34 weeks (53/66).
- Term deliveries -34% (22/66)
- Late preterm deliveries-37% (24/66)
- NICU care required in-17% (11/66) babies
- NICU care and neonatal death due to prematurity was 5.7%

References:
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