

OBSTETRIC OUTCOME IN ART

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ART:

- -ICSI
- -cleavage stage biopsy
- -Trophectoderm biopsy
- -Blastocyst transfer
- -Fresh embryo transfer
- -FET
- -Other parameters : age-weight-DFI acrosomal reaction
- -SET or more embryo

Summary

- 1. Ante partum hemorrhage
- 2. PIH
- 3. PPROM
- 4. **CS**
- 5. GDM
- 6. Induction of Labor
- 7. Preterm birth
- 8. FET pregnancies
- 9. Blastocyst transfer
- 10. Trophectoderm biopsy
- 11. Other factors; DFI, Age, BMI,...
- 12. conclusion

Antepartum hemorrhage (previa , Abruption)

-increase in singleton IVF, ICSI, compered to spontaneous Pregnancy (2.49———2)

Hypertensive disorders of pregnancy

- PIH
- Preeclampsia
- Eclampsia
- *Increase in singleton IVF/ICSI compared to spontaneous

Pregnancy (1.49 ———1)

Preterm premature rupture of membrane:

*Increase risk of singleton PPROM in IVF/ICSI compared to spontaneous pregnancy

Cesarean section

- Elective
- Emergency
- *Increase in singleton IVF/ICSI compared to spontaneous Pregnancy

Gestational diabetes

*Increase risk singleton in IVF/ICSI compared to spontaneous

$$(1.48 \longrightarrow 1)$$

Induction of Labor

*Increase risk in singleton in IVF/ICSI compared to spontaneous

(Hum Rep up 2012)

Preterm delivery

- 2 Fold increase in preterm delivery (<37w)_in singleton IVF/ICSI compared to spontaneous pregnancies (10% → 5%)

(Ultra ob gyn 2018)

- Trans vaginal cervical length is advised for IVF/ICSI pregnancies to predict preterm deliveries

(Ultra ob gyn 2017,2010)

FET versus Spontaneous conception

- Increase risk of CS
- Increase birth <37w and <32w

Blastocyst transfer versus Spontaneous conception

- Increase placenta previa, accreta, preeclampsia
- The rate is decreased with high oxygen incubators

Trophectoderm biopsy versus IVF {PGT(PGS + PGD)}

- Singleton pregnancies
- Increase risk of preeclampsia (3 Fold)

(ferti -steri 2019)

- In Trophectoderm bx placenta cell is removed
- Shallow placentation preeclampsia, IUGR

(ferti -steri 2019)

- Increase risk of placenta previa (3 Fold)
- Similar incidences of GDM, PPROM, PPH, CS, inductions of Labor

(ferti -steri 2019)

Female age

Decrease pregnancy outcomes? (>38.>40)

Male age:

- Epigenetic problem ?(DNA methylation)
- Still under ??

DFI, Acrosomal levels

- Can increase abortion rate alter pregnancy outcome

Female and male BMI

- No direct on pregnancy out come

Conclusion

- IVF, ICSI (singleton) pregnancies must be managed as high risk
- According to confidentiality, relation between reproductive medicine specialist and obstetrician must be tighter.

