

Egyptian Fertility Sterility Society

The perinatal outcomes after hysteroscopic treatment of intrauterine Synechiae (IUS)

What is known already?

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Hysteroscopic procedures are considered the reference standard for the treatment of IUS [1] (Thomson et al., 2007).

However, recent retrospective studies have suggested that after hysteroscopic adhesiolysis, there was an increased risk of serious perinatal complications, as placenta previa, placental abruption, or morbidly adherent and retained placenta [2] (Zhang et al., 2020).

Also, other complications including postpartum haemorrhage and neonatal complications, including preterm birth, intra-uterine growth restriction (IUGR), or stillbirth were reported [3-5] (Deans et al., 2018; Feng et al., 2020; Baradwan et al., 2022).

A recent meta-analysis (32 studies (N = 3812)) of obstetric and neonatal outcomes in patients after treatment of hysteroscopic adhesiolysis [6] reported that: the question of whether there is an increased prevalence of obstetric and neonatal complications in patients after hysteroscopic remains unanswered.

However, prospective studies evaluating perinatal/neonatal outcomes in women with IUS history are sparse, and the characteristics accounting for the respective morbidity of IUS patients remain to be elucidated.

What is New?

A more recent propensity score-matched cohort study including 198 patients, 66 prospectively enrolled patients with moderate to severe IUS and 132 controls has reported that:

- 1- The overall perinatal morbidity, including abnormally invasive placenta was 41.7% vs 0%; $P < 0.001$.
- 2- Retained placenta requiring manual or surgical removal: (46.7% vs 6.7%; $P < 0.001$).

- 3- Peripartum haemorrhage occurrence: 31.7% vs 3.3%; $P < 0.001$)
- 4- Premature delivery: 28.3% vs 5.0%; $P < 0.001$.
- 5- No increased frequency of: intra-uterine growth restriction or worsened neonatal outcomes.
- 6- The main factor related to abnormally invasive placenta was ≥ 2 hysteroscopic procedures (OR 11.0; 95% CI: 1.33–91.23), followed by 2 D&Cs preceding IUS treatment (OR 5.11; 95% CI: 1.69–15.45), and D&C performed postpartum as compared to post abortion (OR 3.0; 95% CI: 1.03–8.71).
- 7- A ≥ 2 hysteroscopic procedures were observed as the most important factor for retained placenta (OR 13.75; 95% CI: 1.66–114.14), followed by ≥ 2 preceding D&Cs (OR 5.16; 95% CI: 1.67–15.9).
- 8- Premature birth was significantly associated with the number of preceding D&Cs Or for ≥ 2 4.29; 95% CI: 1.12–14.91).
- 9- Premature delivery (< 37 gestational weeks) was reported more frequently for patients with IUS (28.3% vs 5.0%; $P < 0.001$).
- 9- No increased frequency of Intra-uterine growth restriction or worsened neonatal outcomes were observed in IUS group.

Implications of the findings

This study represents one of the first and largest prospective studies of perinatal and neonatal outcomes in IUS patients with a prospective analysis of the risk factors of characteristics significantly influencing reported morbidities among patients with IUS.

References

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