|  |  |  |  |
| --- | --- | --- | --- |
|  | **CSD**  **(N=117)** | **Non CSD**  **(N=203)** | **P-value** |
| **Age, years** | 31.4 ± 4.3 | 32.0 ± 4.6 | 0.243 |
| **BMI (kg/m2)** | 21.5 ± 2.3 | 22.2 ± 2.8 | 0.007 |
| **AMH (ng/ml)** | 2.8 [1.5;5.1] | 2.8 [1.5;5.3] | 0.787 |
| **Indication for infertility treatment, n (%)** |  |  | 0.457 |
| Unexplained | 29 (24.8%) | 70 (34.5%) |  |
| Male factor | 20 (17.1%) | 31 (15.3%) |  |
| Ovulation disorder | 19 (16.2%) | 25 (12.3%) |  |
| Diminished ovarian reserve | 18 (15.4%) | 29 (14.3%) |  |
| Tubal factor | 16 (13.7%) | 18 (8.9%) |  |
| Endometriosis | 2 (1.7%) | 1 (0.5%) |  |
| Others | 13 (7.1%) | 29 (14.3%) |  |
| **Indication for caesarean section, n (%)** |  |  | 0.655 |
| Planning | 82 (70.1%) | 149 (73.4%) |  |
| Emergency | 35 (29.9%) | 54 (26.6%) |  |
| **Wound infection, n (%)** |  |  | 0.009 |
| No | 113 (96.6%) | 201 (99.0%) |  |
| Yes, without reoperation | 4 (3.4%) | 0 (0.0%) |  |
| Yes, with reoperation | 0 (0.0%) | 2 (1.0%) |  |

**Table 1.** Patient demographic and clinical characteristics at baseline

*Note: Values are presented as mean ± standard deviation, median [25th; 75th percentile], or number of patients (%).*

*Abbreviation: CSD, caesarean scar defect; BMI, body mass index; AMH, anti-Müllerian hormone*

**Table 2.** Infertility treatment characteristic

|  |  |  |  |
| --- | --- | --- | --- |
|  | **CSD**  **(N = 117)** | **Non CSD**  **(N = 203)** | **P-value** |
| **Duration from procedure to infertility treatment consultation, (months/days/years?)** | 6.1 ± 3.3 | 5.1 ± 3.5 | 0.15 |
| **Treatment method, n (%)** |  |  | 0.186 |
| Expectant management | 11 (9.4%) | 32 (15.8%) |  |
| Ovulation induction | 6 (5.1%) | 9 (4.4%) |  |
| In vitro fertilization | 93 (79.5%) | 157 (77.3%) |  |
| Combination of OI and IVF | 7 (6.0%) | 5 (2.5%) |  |
| **Number of Ovulation induction cycle, n (%)** |  |  |  |
| 1 | 22 (18.8%) | 43 (21.2%) |  |
| 2 | 6 (5.1%) | 5 (2.5%) |  |
| ≥3 | 2 (1.7%) | 2 (1%) |  |
| **Number of in vitro fertilization cycle, n (%)** |  |  |  |
| 1 | 85 (72.6%) | 146 (71.9%) |  |
| 2 | 9 (7.7%) | 9 (4.4%) |  |
| ≥3 | 4 (3.4%) | 7 (3.5%) |  |
| **Endometrium fluid, n(%)** | 36 (30.8%) | 9 (4.4%) | <0.001 |
| **Cancel treatment due to endometrium fluid, n(%)** | 8 (6.8%) | 3 (1.5%) | 0.021 |
| **CSD repair operation, n(%)** | 1 (0.09%) | 0 (0.0%) | 0.366 |

*Note: Values are presented as number of patients (%).*

*Abbreviations: CSD, caesarean scar defect; OI, ovulation induction; IVF, in vitro fertilization*

**Table 3**. Pregnancy outcome and complication after 12 months from…

|  |  |  |  |
| --- | --- | --- | --- |
|  | **CSD**  **(N = 117)** | **Non CSD**  **(N = 203)** | **P-value** |
| **Pregnancy outcome** | | | |
| **Live birth rate, n (%)** | 46 (39.3%) | 67 (33.0%) | 0.31 |
| **Median time to live birth, days** | 171.0 [156.0;202.8] | 162.0 [157.0;187.8] | 0.687 |
| **Birth weight, gram** |  |  |  |
| Singleton | 3203.7± 429.2 | 3212.6±472.1 | 0.936 |
| Twin | 2598.1±227.3 | 2641.2±407.3 | 0.713 |
| **Positive βhCG rate, n (%)** | 62 (53.0%) | 96 (47.3%) | 0.041 |
| **Clinical pregnancy rate, n (%)** | 57 (48.8%) | 85 (41.9%) | 0.045 |
| **Ongoing pregnancy, n (%)** | 47 (40.2%) | 71 (35.0%) | 0.419 |
| **Pregnancy complication** | | | |
| **Ectopic pregnancy rate, n (%)** | 4 (3.4%) | 2 (1.0%) | 0.196 |
| **Miscarrage pregnancy rate, n (%)** | 8 (6.9%) | 13 (6.4%) | 0.582 |
| **Multiple pregnancy rate, n (%)** | 11 (9.4%) | 13 (6.4%) | 0.447 |
| **Placenta previa, n (%)** | 1 (0.9%) | 3 (1.5%) | 0.99 |
| **Placenta accreta, n (%)** | 1 (0.9%) | 0 (0.0%) | 0.366 |
| **Uterine rupture, n (%)** | 0 (0.0%) | 0 (0.0%) | - |
| **Postpartum hemorrhage, n (%)** | 2 (1.7%) | 0 (0.0%) | - |

*Note: Values are presented as mean ± standard deviation, median [25th; 75th percentile], or number of patients (%).*

**Table 4**. The joint effects of demographic baselines and infertility treatment characteristics on the live birth ratio

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No LB**  (N=207) | **LB**  (N=113) | **OR [95% CI]; P-value** | **OR [95% CI]; P-value\*** |
| **Group, n (%)** |  |  |  |  |
| Non CSD | 136 (65.7) | 67 (59.3) | Ref | Ref |
| CSD | 71 (34.3) | 46 (40.7) | 0.76 [0.47;1.22]; 0.256 | - |
| **Age, years** | 32.1 ± 4.9 | 31.2 ± 3.6 | 0.96 [0.91;1.01]; 0.084 | 0.97 [0.92;1.03]; 0.29 |
| **BMI, kg/m2** | 22.0 ± 2.8 | 21.9 ± 2.5 | 0.98 [0.9;1.07]; 0.686 | - |
| **AMH, ng/ml** | 2.6 [1.3;4.9] | 3.0 [1.9;5.6] | 1.03 [0.94;1.13]; 0.478 | - |
| **Duration of infertility, years** | 3.0 ± 2.7 | 2.8 ± 2.3 | 0.97 [0.88;1.06]; 0.468 | - |
| **Duration from procedure to infertility treatment consultation, (months/days/years?)** | 5.9 ± 3.6 | 4.7 ± 3.1 | 0.9 [0.84;0.97]; 0.005 | 0.9 [0.84;0.97]; 0.007 |
| **Indication for caesarean section, n (%)** |  |  |  |  |
| Planning | 148 (71.5) | 81 (71.7) | Reference | - |
| Emergency | 57 (27.5) | 32 (28.3) | 1.03 [0.61;1.71]; 0.922 | - |
| None | 2 (1.0) | 0 (0.0) | - | - |
| **Wound infection, n (%)** |  |  |  |  |
| No | 204 (98.6) | 110 (97.3) | Reference |  |
| Yes, without reoperation | 3 (1.4) | 1 (0.9) | 0.62 [0.06;6.07]; 0.679 | - |
| Yes, with reoperation | 0 (0.0) | 2 (1.8) | - | - |
| **Endometrium fluid, n (%)** | 25 (12.1) | 20 (17.7) | 1.57 [0.83;2.97]; 0.169 | 1.6 [0.83;3.1]; 0.16 |
| **Cancel treatment due to endometrium fluid, n (%)** |  |  |  |  |
| No | 200 (96.6) | 109 (96.5) | Ref | Ref |
| Yes | 7 (3.4) | 4 (3.5) | 1.05 [0.3;3.66]; 0.941 | - |

*Note: Values are presented as mean ± standard deviation, median [25th; 75th percentile], or number of patients (%). \* denotes for multivariate analysis*

*AMH, anti-Mullerian hormone; CI, confident interval; CSD, cesarean scar defects; LB, live birth; OR, odds ratio; Ref, reference*