# SARS-CoV-2 infection with mild symptoms during pregnancy and fetal outcome, experience of an Italian second level hospital

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**Objective**. COVID-19 is a pandemic inflammatory disease where endothelial dysfunction, observed also in mildly symptomatic patients, could affect the placenta and compromise pregnancy outcome. Our aim was to study the pregnancy outcome of patients with previous SARS-CoV-2 infection contracted during gestation.

**Materials and Methods**. This is a retrospective study and patients were enrolled with an anamnestic interview during the puerperium. We enrolled 41 women who contracted SARS-CoV-2 infection before twenty-four weeks of gestational age; 87 who contracted the infection after twenty-four weeks of gestational age; and a control group of 159 women, who did not contract infection during pregnancy.

**Results**. Maternal anthropometric, anamnestic and obstetric features were similar in the three groups. There is no relevant difference between the results of the three categories examined in terms of gestational age at delivery (273.54 days *vs* 273.73 days *vs* 274.39 days, p = 0.84), mode of delivery (vaginal delivery 53.66% *vs* 58.62 % *vs* 58.49 %; operative vaginal delivery 5.88% *vs* 9.19% *vs* 8.80%; cesarean section 41.46% *vs* 32.18 % *vs* 32.71 %; p = 0.49), fetal weight at birth (3224.02 g *vs* 3276.65 g *vs* 3235.57 g, p = 0.75) admission in neonatal intensive care (0 % *vs* 2.2 % *vs* 4.4%, p = 0.30).

| | Sars-Cov-2 infection <24 weeks of GA N: 41 | Sars-Cov-2 infection >24 weeks of GA N: 87 | Absence of Sars-Cov-2 infection during pregnancy N: 159 | P value |
|---|---|---|---|---|
| GA at delivery (days) | 273,54 (9,49) | 273,73 (9,60) | 274,39 (10,79) | 0,84 |
| Mode of delivery<br>Vaginal delivery<br>Operative vaginal delivery<br>Cesarean section | <br>22 (53,66%)<br>2 (5,88%)<br>17 (41,46%) | <br>51(58,62%)<br>8 (9,19%)<br>28 (32,18%) | <br>93(58,49%)<br>14(8,80%)<br>52 (32,71%) | 0,49 |
| Neonatal weight (g) | 3224,02 (396,94) | 3276,65 (463,54) | 3235,57(456,14) | 0,75 |
| Neonatal weight percentile | 53,14 (26,14) | 57,12 (28,83) | 52,46 (28,40) | 0,46 |
| Admission in neonatal intensive care | 0 (0%) | 2 (2,2 %) | 7 (4,4%) | 0,30 |

Data are presented as Mean (SD) or n(%)

**Conclusions**. The SARS-CoV-2 disease with mild symptomatology, contracted during pregnancy, regardless of the gestational age at the time of infection, does not apparently impact on the fetal outcome in any significant way.