

## Outcomes of Trial of Labor versus Elective Repeat Cesarean Delivery in Women with a Previous Cesarean Delivery

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### ABSTRACT

**Objective:** To compare the maternal and fetal outcomes of trial of labor (TOLAC) versus elective repeat caesarean delivery (ERCS) in women with a previous caesarean delivery in our institution.

**Methods:** All women with a singleton gestation and a prior cesarean delivery in maternity department at Salmaniya medical complex, Manama, Kingdom of Bahrain during the period between June 2017 to July 2018 have been included. Baseline characteristics as well as maternal and perinatal outcomes between women who underwent TOLAC versus ERCS were compared in retrospective descriptive and comparative study

**Results:** This study included 586 women, two thirds (n=347, 59.2%) underwent trial for normal delivery during which more than half succeeded (n=199, 57.3%) and the rest went for emergency cesarean section (n=148, 42.7%). The second group preferred elective cesarean section (n=239, 40.8%). Women in both groups TOLAC and ERCS are very comparable in term of age which was nearly identical on average (31 years vs. 31.2 years). Those in TOLAC arm had significantly higher number of previous normal vaginal delivery compared to ERCS arm (167, 48.1%) vs. (49, 20.5%),  $p < 0.0001$ ). The proportion of diabetes mellitus patients was 2.3 times higher in the elective cesarean section group than those who underwent trial of labor (4.6% vs. 2%). Also, the proportion of subjects with hypertension was 3.3 times higher in the ERCS group than the TOLAC group with a statistically significant difference (3.8% vs. 1.2%,  $p = 0.046$ ). The two groups were compared against various maternal and fetal outcomes and turned to be quite similar except for the total blood loss and ultimately the need for blood transfusion which was associated more with ERCS.

**Conclusion:** In our population, after first cesarean delivery; diabetes mellitus and systemic hypertension appears as a potent driven factors for ELCS while the major driven factor for TOLAC is previous normal delivery with overall moderate success rate. No major differences in maternal and fetal outcomes but risk of bleeding is more in ELCS.

**Key words:** TOLAC, VBAC, ERCS, Previous cesarean section

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