

## **The Effectiveness of Cervical Cerclage in Preventing Preterm Labor in a Twin Pregnancy**

Zainab Alkhaja, MD\* Zainab Al-Jufairi, MHPE, FRCOG\*\*

**Objective:** To evaluate the effectiveness of elective cervical cerclage in reducing the rate of preterm birth in a twin gestation. The secondary objective was to compare the gestational age, neonatal outcome and admission to neonatal intensive care unit (NICU) in a twin gestation with cervical cerclage compared to the control.

**Design:** A Retrospective Cohort Study.

**Setting:** Salmaniya Medical Complex, Bahrain.

**Method:** Twin pregnancy with or without cervical cerclage who delivered between 1 January 2014 and 31 December 2015 were included in the study. A total of 450 women with twin gestation were recruited; 91 with cervical cerclage and 359 without cerclage (control). The age, parity, type of pregnancy, risk factors of preterm delivery, gestational age and neonatal intensive care admission were compared between both groups.

**Result:** The mean gestational age in women with cervical cerclage was 33.2 weeks $\pm$ 4.9 and the gestational age in women without cervical cerclage was 35 weeks $\pm$ 5.6; the difference was not statistically significant between both groups. One hundred fifty-nine (44%) women without cervical cerclage had delivered between 25-35 weeks of gestation compared to 34 (37.4%) women with cervical cerclage, but the difference between both groups did not reach a significant level (P-value 0.139). However, eight (2.2%) women without cervical cerclage had delivered before 25 weeks of gestation and no women with cervical cerclage delivered at this time.

The newborns of 22 (24.18%) women with cerclage were admitted to the NICU compared to 139 (38.7%) without cerclage. There was a significant difference between both groups regarding newborn admission to the NICU; it was higher among babies of women without cervical cerclage (P-value 0.001).

**Conclusion:** Elective cervical cerclage in twin pregnancy did not reduce the preterm delivery rate; however, it reduced the admission rate to the NICU and reduced extreme prematurity.