The importance of learning curve in practice of cervical pessary

Franca MS, Hamamoto TENK, Hatanaka AR, Mattar R, Moron AF

UNIVERSIDADE FEDERAL DE SAO PAULO, SAO PAULO, Brazil

Objective

The experience in the medical practice is an important factor to improve the results of treatments. The aim of this report is to confirm that to the extent technological advances are occurring in medicine the experience has to be valorized. Besides been a relatively simple technique, the attachment of cervical pessary for prevention of prematurity also needs a learning curve for the success of treatment. Currently the most valid studies in this area are RCT (Randomized Clinical Trial), due to its statistical power and its association with scarcity of cases with short cervix, so RCT have a wilder amplitude and in able the assessment a larger number of patients. However, this type of study decentralizes the attendance, and the learning curve is not achieved because of the low number of patients per researcher. The group of screening of prematurity of the Federal University of Sao Paulo, chose in 2011, to get familiar with this new treatment, and start a case control non-randomized study to treat short cervix and learn more about this subject.

Methods

Patients were included between 16 to 26 weeks and 6 days, at the time of morphological second trimester ultrasound, and if a short cervix (under 25mm) was detected, the patients were treated, after signing an informed consent form. At present, the group has been following up approximately 80 cases and has identified important improvement in the perinatal results, with same technique throughout this 4 years of experience. The comparison of perinatal results between pessary users at the initial phase (first 1. 5 years) (Group 1), against pessary users in the final phase (last 2. 5 years) (Group 2), was procedure. This material was collected by few researches and 50 singleton pregnancies were included between 16 and 26 weeks and 6 days. Statistical analysis and comparison of the groups was submitted to Student t test.

Results

The descriptive results present no difference between the groups regarding age, parity, cervical length or gestational age at diagnosis of short cervix. The results for Group 1 presented 35 w 5d ± 28 days and Group 2 presented 37 w 6d ± 12 days, for the mean gestational age at birth (P = 0, 02*). The mean weight at birth was 2624g ± 885g in Group 1 and was 3091g ± 415g in Group 2 (P=0, 05*).

Conclusion

Due to important differences detected between initial and final phase and improvement of the results over the years, the learning curve has to be considered an important factor application of this technique. The team of researches developed expertise in identifying pessaries not correctly attached and repositioning them, just by simple maneuver on the tissue of anterior vaginal wall, to put the cervix inside of pessary, when cervix is out of the ring after transvaginal ultrasound assessment.