



Adverse obstetric outcomes associated with cervical loop electrosurgical excisional procedure and short cervix in the second trimester of gestation

Garrido-Gimenez C, Capote-Lopez S, Cabrera S, Goya-Canino, M, Melnychuk, T, Centeno C, Higuera T, Cabero-Roura L, Gil-Moreno A, Carreras-Moratonas E
Hospital Vall d'Hebron, Barcelona, Spain

Objective

To ascertain whether differences exist in terms of obstetric complications and perinatal results between pregnant women with short cervix after a cervical loop electrosurgical excisional procedure (LEEP) for cervical intraepithelial neoplasia and those with no LEEP history and an asymptomatic short cervix in the second trimester.

Methods

A comparative retrospective study was conducted of second-trimester scan findings between two cohorts of women, with and without a history of LEEP, with singleton pregnancies. Each cohort consisted of two subgroups, yielding four groups in all were studied: patients with LEEP and normal cervix (group 1), LEEP and short cervix plus treatment (group 2), no LEEP history but with short cervix plus treatment (group 3) and no LEEP history but with short cervix and no treatment (group 4).

Results

Four hundred and ninety-eight patients were included. Preterm birth rate <28 weeks was higher in group 2 (2/14 cases (14. 3%)) compared with the other groups: 1/104 (0. 9%) group 1, 4/190 (2. 1%) group 3 and 16/190 (8. 4%) group 4; $p=0.001$. Preterm birth rate < 34 weeks was also higher in group 2: 14 cases (28. 5%) vs. 2/104 (1. 9%), 12/190 (6. 3%), 51/190 (26. 8%); $p<0.0001$] and at < 37 weeks [10/14 (71. 4%) group 2 vs. 18/104 (17. 3%), 41/190 (21. 5%) and 113/190 (59. 47%); $p<0.0001$]. Respiratory distress syndrome, intraventricular haemorrhage, neonatal sepsis and neonatal death were also more frequent in group 2.

Conclusion

Pregnant women with LEEP history and short cervix (group 2) had an increased risk of PB at < 28, < 34 and <37 weeks of gestation and neonatal morbidity despite treatment compared with the other groups.