

EP13.01. Short cervix prevalence in dichorionic diamniotic twin pregnancies and associated perinatal outcomes

Anali Ramirez-Saucedo¹ MD; Mario I. Lumbreras-Marquez¹ MD, MSc; Sandra Acevedo-Gallegos¹ MD, MSc, PhD; Dulce M. Camarena-Cabrera¹ MD, MSc; Diana Y. Copado-Mendoza¹ MD, MSc;

Jose A. Ramirez-Calvo¹ MD, MSc; Maria J. Rodriguez-Sibaja ¹ MD; Yubia Amaya-Guel¹ MD, MSc; Berenice Velazquez-Torres¹ MD, MSc; J. Manuel Gallardo-Gaona¹ MD, MSc, PhD¹

¹ Department of Maternal-Fetal Medicine; Instituto Nacional de Perinatologia, Mexico City, Mexico

Objective

- To determine the prevalence of short cervix (≤ 25.0 mm) in dichorionic diamniotic pregnancies and its associated perinatal outcomes in a tertiary academic center

Methods

- Single-center retrospective cohort study including patients with dichorionic-diamniotic twin pregnancies between March 1, 2017, and December 31, 2024
- Cervical length was measured via transvaginal ultrasound between 18.0 and 24.0 weeks of gestation as a screening method for preterm birth
- Patients were divided into two groups: those with a cervical length ≤ 25.0 mm and those with >25.0 mm. Perinatal outcomes were compared between the groups mentioned above

Results

- A total of 265 patients met the inclusion criteria
- The prevalence of a short cervix in the study population was 10.2% (95% CI: 6.8-14%)
- A cervical length ≤ 25.0 mm was significantly associated with a higher risk of preterm birth, occurring in 82.6% of cases vs. 60.1% in the group with a normal cervical length ($P=0.011$); Table
- The mean gestational age at birth was 33.4 +/- 3.8 weeks in the short cervix group, compared to 35.2 +/- 2.4 weeks in the normal cervix length group ($P=<0.001$); Figure

Conclusions

- This single-center study found that cervical length shortening in dichorionic-diamniotic twin pregnancies is prevalent
- Furthermore, a short cervix in this population is associated with increased odds of spontaneous preterm birth, even in patients who received medical and surgical interventions

Figure. Neonatal outcomes by cervical length group

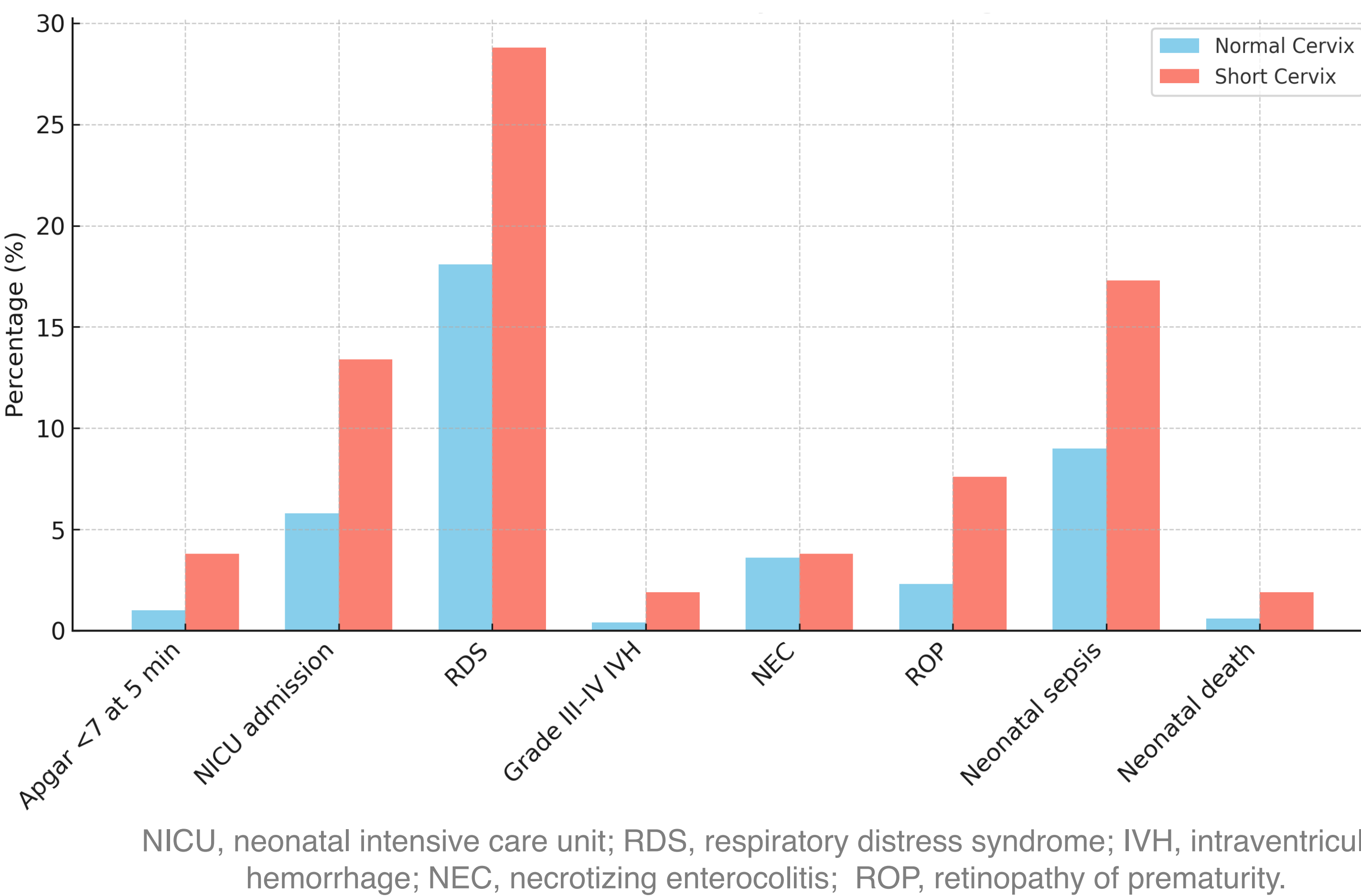


Table. Obstetric characteristics and maternal outcomes of the study population

Characteristic	Total N=265	Normal Cervix N=238	Short Cervix N=27	P-value
Cervical Length, mm, mean $\pm$ SD	33.2 $\pm$ 8.0	35.1 $\pm$ 5.7	16.9 $\pm$ 7.3	<0.001
Funneling, n (%)	18 (6.8)	3 (1.3)	15 (55.6)	<0.001
Sludge, n (%)	16 (6)	2 (0.8)	14 (51.9)	<0.001
Intervention for Short Cervix, n (%)	–	–	23 (85.2)	–
Type of Intervention for Short Cervix				
Progesterone	–	–	6 (26.1)	–
Cerclage	–	–	18 (78.3)	–
Pessary	–	–	0 (0)	–
Clinical Chorioamnionitis, n (%)	6 (2.3)	4 (1.7)	2 (7.4)	0.116
Preterm Premature Rupture of Membranes, n (%)	41 (15.5)	33 (13.9)	8 (29.6)	0.046
Gestational Age at Delivery, mean $\pm$ SD	35.1 $\pm$ 2.6	35.3 $\pm$ 2.4	33.4 $\pm$ 3.8	<0.001
Total Preterm Birth, n (%)	166 (62.6)	143 (60.1)	23 (85.2)	0.011
Preterm Birth Classification, n (%)				
<37 weeks	101 (60.8)	89 (62.2)	12 (52.2)	0.021
<34 weeks	31 (18.7)	26 (18.2)	5 (21.7)	
<32 weeks	27 (16.3)	25 (17.5)	2 (8.7)	
<28 weeks	7 (4.2)	3 (2.1)	4 (17.3)	
Spontaneous Preterm Birth, n (%)	118 (71.1)	100 (69.9)	18 (78.3)	0.023
Iatrogenic Preterm Birth, n (%)	48 (28.9)	43 (30.1)	5 (21.7)	0.999
Preterm Birth Despite Intervention for Short Cervix, n (%)	–	–	19 (82.6)	–
Birth weight, g, mean $\pm$ SD	2164.4 $\pm$ 501.5	2186.8 $\pm$ 483.3	1964.0 $\pm$ 616.5	0.002