



Shortened Cervical length in early 3rd trimester

predicts preterm birth in twin pregnancies

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PURPOSE

In twin pregnancy,

Shortened CL in 3rd trimester → ? → Spontaneous preterm birth

METHODS

- Retrospective cohort study in Seoul St. Mary's hospital from Jan. 2009 to Dec. 2019
- Inclusion criteria**
 - twin pregnancies
 - CL ≥25mm before 28wks
- Exclusion criteria**
 - No ultrasound results
 - History of cerclage
 - Non-spontaneous preterm birth

GROUP

- Short cervical length group
 - CL <25mm after 28weeks
- Normal cervical length group
 - CL ≥25mm after 28weeks

RESULTS

- Prevalence of short CL in 3rd trimester - **70/173 (40.5%)**
- Spontaneous Preterm birth rate
 - 47.1% in short CL group
 - 24.3% in normal CL group (p=0.002)
- Predictive performance for preterm birth
 - 0.68 AUC (95% CI 0.59-0.76)**
 - 60% sensitivity, 67% specificity
 - 48% PPV, 77% NPV

Table. Clinical Characteristics according to the cervical length in 3rd trimester

	Short CL group (N=70)	Normal CL group (N=103)	p-value
Age	33.8 ± 2.7	33.8 ± 3.4	0.910
Nulliparity	62 (88.6%)	85 (82.5)	0.275
Hx. of preterm birth	0 (0%)	1(1%)	1.000
BMI	18.5 ± 4.7	19.9 ± 8.4	0.138
Smoking	0 (0%)	5 (4.9%)	0.082
Drinking	1 (1.4)	5 (4.9%)	0.403
GDM	5 (7.1%)	7 (6.8%)	1.000
PIH	1 (1.4%)	10 (9.7%)	0.030
CL before 28wks	33 ± 5	38 ± 5	<0.001
CL after 28wks	18 ± 4	33 ± 6	<0.001
C/sec	60 (85.7)	93 (90.3)	0.355
PTB <37wks	33 (47.1)	25 (24.3)	0.002

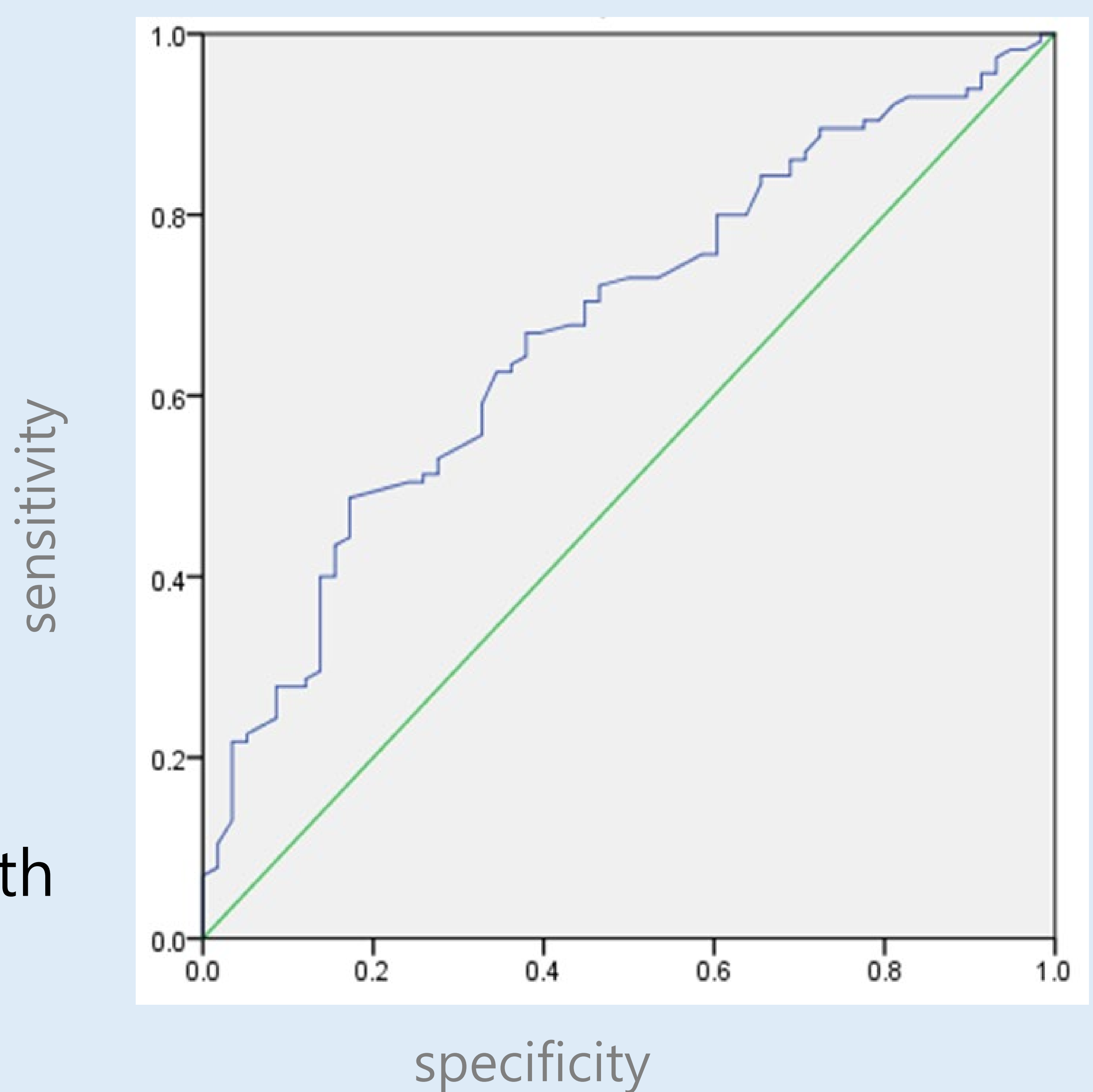


Figure. ROC curve for prediction of preterm birth

CONCLUSION

Shortened CL in 3rd trimester was associated with spontaneous preterm birth in twin pregnancies.

