Objectives

• The aim of this study was to compare the midtrimester cervical elastography parameters between singleton and twin pregnancy in asymptomatic women

Methods

• A prospective observational study of cervical elastography parameters obtained at 18±0-27±6 weeks

• Cervical length and Cervical elastography was obtained using E-cervix™ between November 2015 and December 2017

• ROI was calculated and described as elastographic contrast index, hardness ratio, mean strain level within 1cm from internal, and external OS

• Parameters were compared between singleton and twin pregnancy, subgroup analysis to evaluate the elastography parameters associated with subsequent preterm birth in twin

Results

• No significant difference in CL between singleton and twin pregnancy

• ECI, IOS, EOS were significantly higher (p<0.001) and HR was lower(p<0.001) in twin pregnant women compared to those with singleton pregnant women.

• The preterm group had a significantly higher ECI (p=0.03).

Conclusion

• The midtrimester cervical strain in twin pregnancy was different from singleton pregnancy

• ECI and HR may be considered useful in predicting preterm delivery in twin pregnancy.

*This research was supported by grant of the Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), founded by the Ministry of Health & Welfare, Republic of Korea (grant number: H118C1696).