**Objective**

The role of elastography of the uterine cervix in screening for preterm delivery has been shown. However, the main concern is the reproducibility of elastographic measurements. The aim of this study was to evaluate the interobserver variability of elasto strain ratio - one of the available strain elastography imaging modalities.

**Methods**

Thirty nine pregnant patients were examined by 2 experienced sonographers. Elastographic measurements were performed using an Alpinion E-Cube 15 Platinum equipped with Elasto Strain Ratio software. The software provides a pressure bar, showing whether the compression and image quality are sufficient for the image to be reliable. The area of the internal opening of the cervix as well as the hardest area of the posterior cervical lip were marked to calculate the strain ratio. The values of Elasto Strain Ratio obtained by both operators were compared and the intraclass correlation coefficient was calculated.

**Results**

In all 39 patients satisfactory images were obtained by both sonographers. Median elasto strain ratio was 0.83 (range 0.2 - 1.66) for operator A, and 0.675 (range 0.25 - 1.45). Intra-class correlation coefficient was calculated at 0.85 (95% CI 73 - 92%), indicating a good intraobserver agreement.

**Conclusion**

Elasto Strain Ratio showed a good intraobserver agreement and seems a promising tool for further studies involving elastographic assessment of the uterine cervix in pregnancy.