Comparison of the clinical outcomes of non-surgical and surgical treatment of cornual pregnancies

Introduction
To compare the clinical efficacy and safety of ultrasound (US) guided intragestational sac injection of methotrexate (MTX) and cornual resection in the management of cornual pregnancies.

Method
Between January 2007 and December 2017, retrospective review of diagnosed with cornual pregnancy at a single center, CHA Bundang Medical Center. We treated 19 cases in which there was implantation at the cornual area with embryo heart beat activity at the time of diagnosis by cornual resection. However, 12 cases were treated with local injection of MTX under ultrasound guidance and sixteen with cornual resection. The two groups were compared with respect to the procedure-related and subsequent obstetrical outcomes.

Results
Compared to the cornual resection group, the local MTX treatment group had a much shorter mean procedure time (21.64±7.18 minutes versus 60.53±5.16 minutes, p<0.01) and the length of hospital stay (2.40±0.54 days versus 3.43±0.37 days, p=0.018).

The decrease in hemoglobin (Hb) level after the procedure was lower in the local MTX treatment group (1.59±0.16 g/dL versus 2.54±0.29 g/dL, p=0.012). There was one case of uterine cornual rupture in a subsequent pregnancy in the cornual resection group.

Conclusion
Non-surgical treatment is a more effective method than cornual resection for the management of cornual pregnancies and is associated with better clinical outcomes.