Hysteroscopic Hydrotubation of the Equine Oviduct

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The equine oviduct can be evaluated by hysteroscopic hydrotubation. Author’s address: Inoue Equine Clinic, Shizunai-Mena 453-48, Shin-Hidaka, Hokkaido, 056-0001, Japan; e-mail: equine@mopera.net. © 2013 AAEP.

1. Introduction
Current methods to assess oviductal patency involve laparoscopy or laparotomy. Development of a method that does not require surgery would be of great diagnostic and prognostic merit. This study evaluated the hysteroscopic-guided hydrotubation of the equine oviduct through the use of videoendoscopy in standing mares.

2. Materials and Methods
Both oviducts from each of 10 sedated mares were used in this study. A catheter was inserted into the uterotubal junction with a guide wire under endoscopic observation, and a dye was flushed into the oviduct. Peritoneal fluid was collected by ultrasound-guided abdominocentesis and was inspected visually and by spectrometry for the presence of dye. A colpotomy was performed, and the endoscope was inserted into the abdominal cavity to inspect for the presence of the dye in the oviduct.

3. Results
In 15 of 20 attempts, the catheter was successfully inserted into the uterotubal junction, and dye was observed at the ampulla and fimbria. In two mares, the videoendoscope could not be manipulated to insert the catheter. Only one of two oviducts was flushed in an additional mare because insufflation of the uterus could not be maintained. The color of the dye was evident macroscopically and spectrophotometrically in four of eight mares from which peritoneal fluid was successfully collected.

4. Discussion
The results suggest that hysteroscopic-selective hydrotubation can be a less invasive tool for diagnosis and treatment of suspected blockage of the equine oviduct.