Transcervical Insemination(TCI) in Dogs

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Purpose: Although a transcervical insemination(TCI) method can deposit sperm closer to the site of fertilization more effectively than conventional vaginal insemination, this method is not performed generally in our country. The purpose of this study is to review the results of TCI using endoscopic methods for patients of our hospital with or without breeding problems and evaluate the availability of routine breeding procedures.

Materials and Methods: A total of 46 bitches were inseminated using the transcervical endoscopic method, 18 with fresh semen and 28 with frozen semen. For all bitches of 12 breeds, the timing of the artificial insemination was based on a clinical evaluation, including vaginal smear and serum progesterone concentration. A single insemination was performed on each bitch on day 3 post ovulation.

Results: The pregnancy rate in this study was 100% (18/18) for fresh semen and 89.3% (25/28) for frozen semen. The mean litter size was 6.6 \pm 2.5 (2–12) for fresh semen and 6.3 \pm 2.1 (1–11) for frozen semen, respectively.

Conclusion: Pregnancy rate in this study was high compared with results of previous studies using vaginal insemination and surgical insemination. Results of this study suggest a possibility of substitution TCI for conventional vaginal insemination or surgical insemination. Considering the safety and efficiency, TCI method seems a valuable tool to achieve successful pregnancies in bitches.

Key words: transcervical insemination, frozen semen, endoscope, pregnancy rate, dog

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