

Transcervical Insemination

Q: What is transcervical insemination (TCI)?

A: TCI is a technique in which a rigid endoscope is used to locate the cervix and pass a catheter through it for intrauterine insemination of frozen semen without the need for surgery.

Q: How is the technique performed?

A: An endoscope (essentially a tiny video camera) is passed up the vaginal canal of a bitch and to the cervix. The inseminator is able to watch the positioning of the catheter on a TV monitor to which the endoscopic view is shown. The actual insemination can be visualized, ensuring that the deposition of semen is in the uterus and that minimal back flush occurs.

Q: Can all bitches be inseminated this way?

A: A vast array of breeds have been successfully inseminated using TCI.

Q: Is the technique safe?

A: The risk of trauma or infection is an important consideration. Gentle and patient manipulation of the endoscope and catheter should not cause a problem with the cervix or vaginal wall unless a pathologic condition already exists. During estrus and at the time of insemination, the vaginal walls are thicker and less susceptible to trauma.

Q: Will the technique cause infections?

A: Bacteria can be routinely isolated from the uterus and vagina during estrus without causing apparent problems. This is likely due to the increased resistance to infection during this time. Therefore, infections caused by this technique are rare if proper sanitation of equipment and stringent quality control are adopted.

Q: What results can be expected using this technique?

A: This technique provides intrauterine deposition of semen, which is a vital part of frozen semen technology. Equally important to the successful use of frozen semen are the timing of the insemination, semen quality, and bitch fertility. Results from a



trial comparing TCI techniques demonstrated that conception rates of 83.3% and an average litter size of 7.5 were possible in bitches of unknown breeding history.

Q: *What is not included?*

A: Progesterone testing and interpretation is not included.

Source: Wilson, Marion S. (2001) Transcervical Insemination Techniques in the Bitch. Clinical Theriogenology, The Veterinary Clinics of North America, Small Animal Practice.