Orchiopexy and GnRH Treatment to Heal Azoospermia in an English Bulldog Associated with Bilateral Cryoptorchidism

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Signalment: An 18-months old English bulldog associated with bilateral cryoptorchidism at the inguinal region was examined for semen evaluation. Based on blood and serum analysis and clinical examination the bulldog was in good health state. Azoospermia was diagnosed by the semen analysis.

Results: Anesthesia for the surgery was done with atropine sulphate (0.05 mg/kg) for preanesthesia and with ketamine plus rumpun for the maintenance.

Each scrotum was opened and the testicle situated at the inguinal region was pulled downward, and then a part of testicle was ligated to the scrotal wall. Each scrotum was sutured following the above procedures.

From one month after the orchiopexy, the patient was treated with GnRH (50 ng/one time) twice at every two weeks interval. Semen evaluation was performed two months later from the last treatment at every two months interval for two times.

At the 1st semen evaluation (2 months after the last GnRH treatment) the semen showed azoospermia, however, at the 2nd examination 6 live sperm were found. At the 3rd examination (7 months after orchiopexy) the semen showed normal sperm characteristics except small number of sperm. At the 8 month after orchiopexy, artificial insemination with the bulldog's collected semen was performed to an English bulldog female. AI was done twice at 2 days interval. At 61 days after the 2nd AI, the female delivered 6 healthy offsprings.

Clinical relevance: In this case of an English bulldog male, both testicles were situated at the inguinal region in atrophied state, however, the orchiopexy along with GnRH treatment was probably done before the complete degeneration of the male's reproductive system. This can suggest the cryoptorchidism at the inguinal region can be healed if orchiopexy is performed at earlier reproductive life.

Key words: artificial insemination, cryoptorchidism, GnRH treatment, orchiopexy, semen evaluation

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