The Indian Journal of Animal Reproduction; 29(1): 112-114; June 2008

Case Report

Cystic Endometrial / Glandular Hyperplasia in Rabbit: A Case Study

G. K. DAS* AND K. S. RISAM[2]

North Temperate Regional Station , Central Sheep and Wool Research Institute,
Garsa (Via- Bhuntar), Kullu, H. P. –175141.
gkdasivri@yahoo.co.in

ABSTRACT

Present communication records the incidence of cystic endometrial / glandular hyperplasia in a New Zealand White rabbit from sub-temperate climatic region of India.

Key Words: Rabbit, Cystic endometrium, Glandular Hyperplasia.

Cystic endometrial/ glandular hyperplasia is seen in all species of animals including rabbits (Jones and Hunt, 1983). It is common in bitches and cats of all ages but more frequent in aged animals over 6 years (Roberts,1971). Cystic endometrial hyperplasia syndrome which precedes pyometra has been considered as an infectious cause of infertility as a result of conception failure and embryonic resorption in bitch and queen (England, 2001).

In the present study, we have examined the cystic endometrial / glandular hyperplasia in a rabbit doe which had died and was presented for post-mortem examination. The doe belonged to New Zealand White breed, 2 year and 5 months of age, maintained as a selected female for breeding purpose. Clinical history revealed that the doe kindled twice previously with an average litter of 5 and remained open (as not bred) for more than 10 months since last kindling. During the necropsy study, the entire genitalia was carefully separated out from the peritoneum, collected and later on examined in detail for genital abnormalities.

Reproductive tract of the doe showing all the genital structures is presented in Fig. A. Necropsy findings revealed highly congested vaginal mucous membrane (Fig. E). Both the cervix were patent.

In one cervix, some sticky muco-purulent exudate was observed. The fallopian tubes were congested and the ovaries were normal in size having small sized follicles (left, 15 and right, 9) on the surface (Fig. D). The mucosal surface of both the horns were congested and filled with cystic diliatation of endometrial glands which appeared as small cyst like structures as previously reported in bitches (Jones and Hunt, 1983). The cystic endometrial hyperplasia in bitch develops as a result of prolonged hormonal i.e. progesterone, stimulation usually from retained corpora lutea, luteal cysts, rarely luteomas and is often associated with pseudopregnancy (Roberts, 1971; Jones and Hunt, 1983). In rabbits, however, the condition has been seen in association with pseudopregnancy due to retained corpora lutea (Jones and Hunt, 1983). In the present study, both the ovaries were normal in size and we could not detect any distinct luteal structure on either of the ovarian surface. Hence, the exact triggering factor causing the condition in this study remained unclear.

REFERENCES

England, G. (2001). Infertility in the bitch and queen. In: Arthur's Veterinary Reproduction and Obstetrics. D. E. Noakes, T. J. Parkinson

*Senior Scientist; [2]Principal Scientist and Head

Fig. A: Female genital organs showing vagina, uterus, fallopian tubes and ovaries

Fig. B: Endometrium showing congestion and hyperplasia

Fig. C: Endometrium showing cystic diliatation of endometrial glands, fallopian tubes and ovaries

Fig. D: Congested fallopian tubes with normal ovaries.

Fig. E: Congestion of vaginal mucous membrane

and G. C. W. England (ed.), Harcourt (India) Private Limited, New Delhi, India, pp 639-670.

Jones, T. C. and Hunt, R. D. (1983). The Genital System. In: Veterinary Pathology. T. C. Jones and R. D. Hunt (ed.), 5th Edition, Lea & Febiger, Philadelphia, USA, pp 1503-1582.

Roberts, S. J. (1971). Infertility in bitches and queens. In: Veterinary Obstetrics and Genital Diseases (Theriogenology). S. J. Roberts (ed.), 2nd Indian Edition, C B S Publishers and Distributors, Delhi, India, pp 584-603.