Persistent Müllerian Duct Syndrome, (PMDS)

In brief

Persistent Müllerian duct syndrome (PMDS, pseudohermaphroditism) is a disorder of sexual development affecting male Miniature Schnauzers. PMDS is characterised by Müllerian duct derivatives (e.g., uterus) developing in otherwise externally normal-appearing males. The condition is inherited in a sex-limited, autosomal recessive manner, i.e., the disease only manifests in males, although it is inherited via females.

Clinical overview

The males affected with PMDS appear externally normal, but they have a uterus, cervix, part of the vagina, and fallopian tubes. Approximately 50% of PMDS-affected males are cryptorchid (absence of one or both testes from the scrotum). PMDS is characterised by sterility or subfertility, but affected males that are unilateral cryptorchids have sired litters. Aged PMDS dogs may develop pyometra (uterine infection) or a Sertoli cell tumour.

References

Online database

Online Mendelian Inheritance in Animals, OMIA (http://omia.angis.org.au/). Faculty of Veterinary Science, University of Sydney.

Scientific articles


Disease severity

Mild

Clinical signs

- Internal female reproductive organs in externally normal males
- Cryptorchidism
- Sterility or subfertility
- Uterine infections
- Sertoli cell tumour

Mode of Inheritance

Autosomal Recessive

Results of the genetic test are reported as follows:

- Clear
- Carrier
- At risk

Mutation(s) found in:

- Miniature Schnauzer
- Miniature Schnauzer - Black
- Miniature Schnauzer - Black and silver
- Miniature Schnauzer - Pepper and salt
- Miniature Schnauzer - White
- Mixed breed

OTHER DISORDERS