

The study evaluated associations between neutering and urinary incontinence (UI) in bitches under primary veterinary care in the UK.



How common is UI?

Previously reported to affect 3% bitches under primary veterinary care in England (O'Neill et al., 2017).

Neutering and other associations

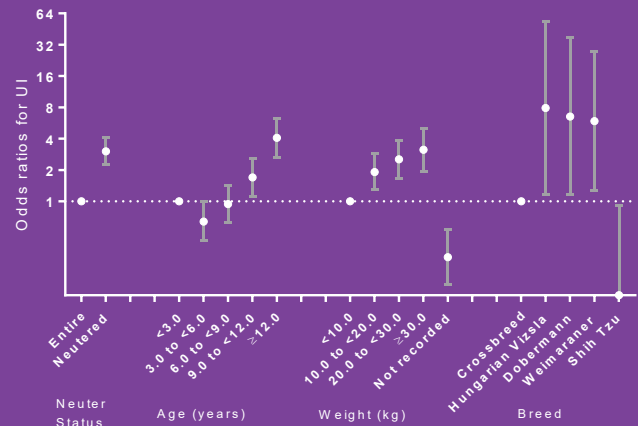
Neutered bitches had 3.01 times the risk of UI compared with entire bitches.

Increased risk of UI was additionally associated with increasing age, increasing bodyweight and certain breeds.

The study included 427 UI cases and 1708 controls November 2014—October 2017.

Pegram et al. (2019) "Spaying and urinary incontinence in bitches under UK primary veterinary care: a case-control study", *Journal of Small Animal Practice* (Free Open Access)

Risk factors for UI



Conclusions

Vets and owners need to include increased risk of UI in making evidence-based recommendations on neutering, whilst also taking other factors into account.