Inactivity, Not Dry Food, Leads to Diabetes in Cats

This retrospective case-control study explored consumption of dry cat food and a sedentary lifestyle as risk factors for development of feline diabetes mellitus (DM). Cases (96) and controls (192) were matched according to age, gender, weight, and body condition to control for these commonly recognized risk factors. A calculated “average exposure” to dry and canned cat food was expressed as a percentage of daily caloric intake. Analysis of data collected from client questionnaires showed no significant correlation between dry food consumption and development of DM. Since dry cat food has a much greater carbohydrate content than canned, high carbohydrate intake also did not appear to be a risk factor. In assessing lifestyles, indoor confinement and physical inactivity were highly significant risk factors for development of DM.

COMMENTARY: Indoor cats are often physically inactive, which may lead to obesity and an increased risk of developing DM. In this study, indoor confinement and physical inactivity were significant risk factors even though the study design controlled for obesity. Other factors associated with DM should be investigated, such as insulin resistance and insulin sensitivity in physically active muscle. In this study, consumption of dry cat food did not increase the risk of developing DM and it was suggested that high carbohydrate intake was also not a risk factor. Because dry and canned cat foods differ by more than carbohydrate content, additional research is needed to evaluate potential roles individual nutrients may or may not play in development of DM. While retrospective case-control studies rely on pet owner recall and confounding variables are sometimes unavoidable, they provide insight into areas for further research.—Laurie E. Walker, DVM, MS

Feline Urethral Obstruction & Perineal Urethrostomy

Perineal urethrostomies were performed on 15 cats with urethral obstruction that could not be relieved by catheterization and reverse flushing. Penile urethral trauma caused by inadequate or recurrent catheterization was present in the cats, and all had abnormalities in the penis, prepuce, and/or scrotal sacs, including hyperemia or swelling. In 5 of the cats, catheterization of the urethra was not possible. Perineal urethrostomies were performed using the Wilson and Harrison technique. Cats were given analgesics (0.1 mg/kg meloxicam) for 5 days, antibiotics for 3 weeks, and Elizabethan collars were placed for 15 days. Cats were evaluated for 6 months after surgery. Postoperative complications included hemorrhage from the surgical site, wound dehiscence, and vesical bladder atony. Bacterial urinary tract infection (UTI) was the most common complication: 53% of the cats developed UTI during the 6-month follow-up period. All UTIs responded to treatment directed at clinical signs. Other than exhibiting signs associated with lower urinary tract disease (4 cats), all cats remained clinically normal during the study; no signs of urethral obstruction were observed, and urethral stricture did not occur. Clients considered their cats to have a good quality of life after surgery. The authors conclude that perineal urethrostomy can be recommended for cases of urethral obstruction that is unresponsive to medical management, as it has few complications when performed by experienced surgeons.

COMMENTARY: Urethral strictures can occur as a result of chronic urethritis or from repeated trauma from catheterization. It is striking in this particular study that all of the cats referred for surgery had had varying degrees of catheter-induced trauma, emphasizing the need for practitioners to use appropriately sized equipment and gentle, proper technique in cases of feline urethral obstruction. The study also seems to refute the general impression of many practitioners that perineal urethrostomy is a last-ditch salvage procedure fraught with long-term problems. For the 6 months these cats were followed, bacterial UTI that responded to treatment was the primary postoperative complication. It would be interesting to see if follow-up extended past 6 months would reveal more problems, such as recurrent bacterial UTI that becomes antibiotic-resistant.—Jennifer L. Schori, VMD