Selamectin: Answer to Flea-Infested Rabbits?

Because no flea-control products are approved for rabbits, which are susceptible to *Ctenocephalides felis* or *C canis* infestation, treatments are extrapolated from other species. On day 0 of this study, 2 groups of juvenile rabbits (*n* = 6/group) were treated with topical selamectin at either 10 or 20 mg/kg; a third group of rabbits (*n* = 6) was used as the control. On days −1, 7, and 14, each rabbit was infested with 50 laboratory-raised unfed fleas. All rabbits were flea-combed on days 2, 9, and 16; each combing was approximately 48 hours after infestation. On day 2, the efficacy against fleas was 91.3% and 97.1% for the 10 mg/kg and 20 mg/kg treatment groups, respectively. Over the course of the 28-day study, efficacy against fleas dramatically decreased as early as 9 days' postapplication. By day 16, efficacy was 6.6% and 13.5% in the 10 and 20 mg/kg groups, respectively. No adverse effects were noted. Pharmacokinetic studies showed that selamectin has a short half-life compared with use in dogs and cats. The recommended dose based on these findings was 20 mg/kg q7day to control fleas.

**Commentary**

Many clinicians have used selamectin at a dose of about 6 mg/kg, usually repeated q2week, to treat mite and flea infestation in rabbits, rodents, and other pocket pets. For certain infections (*e.g.*, *Psoroptes cuniculi* [rabbit ear mite]), single-dose applications of selamectin can be sufficient to effect cure. For flea treatment in rabbits, anecdotal evidence has suggested redosing at monthly intervals.1 There has been little guidance as to the duration of efficacy of selamectin in exotic pets. This small study suggested that flea-infested rabbits may need higher doses of selamectin more frequently.—Dominique Keller, DVM

**Source**


Chest Wall Defects in Kittens

This study described the prevalence of thoracic wall deformities (*e.g.*, pectus excavatum [PE], unilateral thoracic wall concavity [UTC]) in a group of related Bengal kittens. Medical records were reviewed for 244 Bengal kittens that presented for routine vaccination between 2004 and 2011; records of 1748 domestic short-haired kittens presenting for vaccination in the same period were included as controls. Kittens were diagnosed with PE, UTC, or other thoracic wall deformities via palpation. Radiographs were obtained if kittens were dyspneic. Results showed 12 cases of thoracic wall abnormalities in the Bengal kittens; none were found in the controls. Deformities included PE (*n* = 5), UTC (*n* = 6), and scoliosis (*n* = 1). A complex inheritance pattern seemed likely, along with environmental factors. Underdiagnosing and underrecording were possible pitfalls. The authors concluded that thoracic wall deformities can be more common in a group of related Bengal kittens than in the general domestic short-haired population and that there may be a familial link.

**Commentary**

A variety of congenital defects can occur in kittens, and practitioners may not always be familiar with these defects or be comfortable with diagnosis and treatment recommendations. Chest wall defects are among the more commonly seen, and certain breeds (*e.g.*, Bengal) may be overrepresented anecdotally. The most commonly mentioned chest wall defect is PE. There is little information on this subject, although one author of this study previously reported on the flat chest defect in Burmese kittens in the UK. Practitioners presented with a kitten with a chest wall defect should consult the available literature in order to counsel owners appropriately, as prognosis is often favorable.

—Susan Little, DVM, DABVP (Feline)

**Source**