Conclusions: observed.

STENOSIS IN A DOG

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Introduction: Lipofuscin is a pigment that accumulates in the process of ageing, mainly in post-mitotic long living cells (e.g. neurons and myocytes). The pigment consists of various intracellular substances and accumulates primarily in lysosomes.

Materials and Methods: Brain samples were collected from 59 dogs submitted for necropsy examination. Dogs were divided into four groups according to age: group A, up to 5 years; group B, 5–10 years; group C, 10–15 years; and group D, >15 years. Parts of the brain (frontal cortex, parietal cortex, hippocampus, cerebellum and medulla oblongata) were fixed in 10% neutral buffered formalin and processed routinely. Sections (5 μm) were stained with haematoxylin and eosin, periodic acid–Schiff and Ziehl–Neelsen techniques.

Results: Pigment was detected in 80% of the dogs in group D, while this percentage was 30% in group A. In groups A and B, lipofuscin accumulated only in neurons of the medulla oblongata. In groups C and D lipofuscin was detected in various percentages in neurons of all brain sections.

Conclusions: The presence of lipofuscin in neurons was shown in dogs of all ages. The number of positive animals increased proportionally with age. Lipofuscin most often accumulated in large neurons of the nuclei of the medulla oblongata. The accumulation of lipofuscin in neurons increases with the age of the dog and becomes more widespread, involving neurons of different brain regions.

Results: The owners became unable to retract the penis into the prepuce and prepucial evaluation showed vessel engorgement and blood accretion and haematoma formation associated with a perianal bite. For persistent priapism, which followed intermittent episodes of priapism and lasted for 8 weeks. Contralateral joints were used as controls vehicle, GS, CS and HA. Treatment began 3 weeks after surgery and lasted for 8 weeks. Contralateral joints were used as controls (CTRL-OA, CTRL-GS, CTRL-CS and CTRL-HA). Samples were processed using the Donath technique for plastic and measured cartilage thickness (CcTh) and superficial fibrillation (F1). CcTh was measured independently for non-calcified cartilage (ncCcTh) and calcified cartilage (CcTh). Results: OA led to a significant increase in all parameters relative to CTRL-OA. GS showed no effect against OA or CTRL-GS. CS showed no differences against OA and CTRL-CS for CcTh, but a difference in F1 with CTRL-CS, which might suggest less effectiveness in preserving surface. HA had a small positive effect in cCcTh in OA.

Conclusions: The three treatments were able to partially reverse structural effects of OA, particularly swelling, restoring CcTh close to that of healthy joints. GS and HA, but not CS, could also prevent superficial fibrillation.