hyperadrenocorticism and 3 dogs with other diseases not known to cause significant proteinuria. A comparison of TTR and clusterin levels between the SCI and control groups was performed by Western blotting. Based on Fisher’s exact test, the presence of TTR and clusterin was found to be significantly associated with SCI (p = 0.0033 for TTR monomer, p = 0.0046 for TTR dimer and p = 0.0123 for clusterin). The TTR dimer had 100% sensitivity for SCI, but only 58.3% specificity. The TTR monomer had 83% sensitivity and 83% specificity, while clusterin had 83.3% sensitivity and 75% specificity. It was, however, not possible to distinguish between SCI cases and hyperadrenocorticism cases. Albumin depletion of samples was performed to facilitate the detection of low-abundance proteins and to standardise the levels of low-abundance proteins that were loaded onto the gel and analysed by western blotting. However, although the albumin content was reduced and TTR was still detectable by Western blotting in 3 SCI samples, there was generally a concomitant reduction of low-abundance proteins, which is not ideal. In conclusion, TTR and clusterin are promising biomarkers of spinal cord injury. However, as urinary concentrations of these proteins can also increase in dogs with compromised kidney function, further validation studies are required to establish if there are threshold levels of these proteins that are specific for SCI.

Palatability in dogs of Nutri-Plus Gel®, a highly energetic complementary feed indicated to cover the additional energy needs of dogs and cats

Gwendoline Chaix, Fanny Lloret
Virbac, Carros, France

Athletic dogs have high energy requirements. A sufficient energy intake is necessary to maintain ideal body weight and muscle condition scores, as well as a good performance levels. A common mistake is to increase the volume of the regular diet, which may lead to digestive problems that can interfere with the activity of the dog, such as diarrhoea, flatulence or frequent defecation. There are few well-balanced complete diets on the market that are adapted to athletic dogs. Adding a highly energetic complementary feed to the usual complete diet during periods of increased activity can be an interesting alternative.

Nutri-Plus Gel® is a complementary feed that contains high-energy ingredients, animal proteins, vitamins and trace elements. It is typically recommended to cover energy needs during intense physical efforts (e.g. hunting dogs) or as recovery nutrition after intense exercise, when only small volumes can be accepted by the animal. Spontaneous intake is considered to be an essential criterion for a complementary feed that is supposed to be given on a regular basis by the dog owner. The objective of this study was to assess the palatability of Nutri-Plus Gel® in dogs.

Two sub-studies (A and B) were conducted in an independent research centre highly experienced in performing palatability trials. 36 and 34 healthy adult dogs of various breeds, both males and females, were included in trials A and B, respectively. Two criteria were used to assess palatability: prehension and total consumption. Prehension was defined as the act of taking the product spontaneously into the mouth, independently of whether it was then consumed. Total consumption was defined as the act of swallowing more than 95% of the quantity of product offered. Each dog received a teaspoon (5.5 grams) of the product per 5kg of body weight.

Prehension was noted in 89% (32/36) and 94% (32/34) of dogs, in trials A and B respectively. Total consumption was recorded in most of the animals in which prehension had been observed (84%, 27/32 and 72%, 23/32 in trials A and B, respectively).

The excellent prehension rate and the high level of consumption observed in these studies indicate that Nutri-Plus Gel® is highly palatable for dogs, most often leading to a spontaneous intake of the product. These results are consistent with observations previously made on the field.

Nasal melanoma in a 14 year old cross-breed dog

Owen Davies, Emma Holmes, Sam Beck, Angela Taylor, Ana Lara-Garcia
Royal Veterinary College, London, UK

A 14-year-old, neutered male crossbreed border collie was presented for investigation of a 5 month history of sneezing and mucoid-haemorrhagic right-sided nasal discharge. Physical examination revealed reduced airflow through the right nares but was otherwise unremarkable. Haematology was unremarkable and biochemistry revealed only a mild elevation in amylase at 1367 U/L (<1245 U/L). A CT scan revealed a soft tissue mass effect in the dog’s right nasal cavity, with significant turbinates lysis and focal destruction of the right nasomaxillary suture. No lesions compatible with metastatic disease were identified on CT of the dog’s head, neck, thorax and abdomen. Rhinoscopy confirmed the presence of a nasal mass, and biopsies and cytology samples were procured. No evidence of metastatic disease was found by fine needle aspirate cytology of both mandibular lymph nodes.

Cytology of the nasal mass demonstrated a population of pleomorphic polyhedral to spindloid cells among sheets of columnar ciliated epithelium. Nuclei were centrally placed and round with stippled chromatin and one or multiple prominent nucleoli; occasional macronuclei or multinucleate cells were observed. A number of cells contained green pigment, and in conjunction with the cellular pleomorphism were considered suggestive of melanoma. Histopathology described a neoplasm consisting of pleomorphic round to polygonal cells containing varying numbers of nuclei (1-9); abundant eosinophilic cytoplasm with light-brown intracellular granules, and less than 1 mitosis in 10 x400 fields, on a