

September 2008

## Viral Papilloma Vaccine



Over recent months NWL Leeds has received numerous orders for autogenous cattle wart vaccines—and occasional queries about the possibility of making wart vaccines for other species!

For young cattle affected by large, unsightly papillomas that are very likely to be viral in origin, use of a vaccine prepared from excised wart tissue hastens resolution of the lesions.

**If only a small number of cattle are affected, individual animal vaccines can be manufactured without a licence under Veterinary Medicines Directorate (VMD) regulations.**

In this case, the vaccine prepared from wart material harvested from an individual animal is used *solely* for the same animal. The animal's ear tag number must be recorded at the time of sampling—this number is used to uniquely identify the vaccine.

**If viral papillomas are a herd problem—e.g. if a whole cohort of heifers due to enter the milking herd is affected by teat warts—then a herd vaccine made under licence may be more practical.**

In that situation, where animals are to be injected with vaccine made from pooled wart tissue collected from several different individuals, the licence must be in place before manufacture begins—allow 6—8 weeks altogether.

An individual animal vaccine can be produced in 7—14 days. A minimum of 30g of papilloma tissue is required, submitted in a plain sterile container—no preservative should be added.

**We do not recommend the use of autogenous viral papilloma vaccines in species other than cattle.**

Young dogs affected with viral papillomas around the mouth usually self cure over a short time so a vaccine is not likely to be of value. Hygiene measures are important to reduce spread in a kennel situation.

The multiple wart-like lesions commonly affecting older dogs are not viral in origin, but reflect sebaceous gland changes and so a vaccine is inappropriate. In equines, any papillomatous lesion should be thoroughly investigated to rule out equine sarcoid and vaccination is not advised.

## NWL Clin Path Club

The next North East region meeting is at 8.00 pm at the Holiday Inn Leeds Bradford, Tong on 30 Sep 08.

**Susan Duthie from Biobest will speak on 'Rabies control issues when moving PETS.'**

## Troponin I in Cats

Cardiac troponin I (cTnI) has proven to be a highly specific and sensitive marker for myocardial cellular damage in several mammalian species. Blood concentrations of cTnI rise rapidly after myocardial damage and in the cat, raised levels have been associated with a number of cardiac insults including hypertrophic cardiomyopathy (HCM) and trauma.

**The range of plasma cTnI levels in normal cats is <0.03—0.16 ng/mL.**

Interestingly, in one study<sup>1</sup>, cats diagnosed with moderate to severe HCM were shown to have persistently raised cTnI levels, indicating ongoing myocardial damage. Later work<sup>2</sup> demonstrated that hyperthyroid cats were likely to have increased levels of cTnI, but that levels reduced in some cats that were successfully treated to become euthyroid. These results suggested that the myocardial damage induced by chronic exposure to high thyroxine levels can resolve in some cases.

<sup>1</sup> Herndon WE, Kittleson MD, Sanderson K, Drobatz KJ, Clifford CA, Gelzer A, Summerfield NJ, Linde A, Sleeper MM. Cardiac troponin I in feline hypertrophic cardiomyopathy. J Vet Intern Med. 2002 Sep-Oct;16(5):558-64.

<sup>2</sup> Connolly DJ, Guitian J, Boswood A, Neiger R. Serum troponin I levels in hyperthyroid cats before and after treatment with radioactive iodine. J Feline Med Surg. 2005 Oct;7(5):289-300

