

**Vetpath** is a specialist veterinary laboratory dedicated to providing our clients with the finest laboratory diagnostic service. A team of veterinary pathologists and medical scientists with extensive experience in veterinary diagnostic pathology forms the core of the Vetpath team.

# VN News

**JANUARY 2011**

## **PAPILLOMA-VIRUS INFECTIONS – RE-EMERGENCE OF AN OLD PROBLEM**

Papillomaviruses are small double-stranded DNA viruses that cause infections in a wide range of species including humans. In most cases these organisms show prominent species specificity and a strong tropism for particular tissues. Most papilloma virus infections target epithelial cells of the mucous membranes and haired skin. In humans papilloma viruses are a cause of genital warts and chronic infections can progress to the development of squamous cell carcinomas and cervical carcinomas

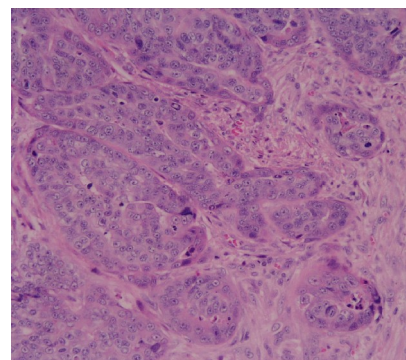
**In horses and cattle** cutaneous papillomas are seen in young animals and may be multiple and show the typical wart-like appearance. Most cases are self-limiting and benign. Cutaneous infection with bovine papillomavirus in horses results in the locally

aggressive neoplasia termed **equine sarcoid**. These tumours involve both the epidermis and dermal mesenchymal elements and can recur following incomplete removal. Metastasis does not occur and only rare lesions will show spontaneous regression.

In **cats** papilloma virus infections of the haired skin result in persistent infections and can give rise to a wide variety of cutaneous lesions:

- **Feline viral plaques** present as multiple slightly raised plaques that may be scaly and pigmented. The condition is rare and usually seen in older animals.. There is a suggestion that these focal lesions may progress to more aggressive neoplasia over time.
- **Feline sarcoids** (Fibropapillomas) are uncommon proliferative lesions in cats where papilloma virus infections cause a prominent localized fibroblastic proliferative reaction within the dermis. These lesions behave in a similar fashion to their equine counterparts and may recur following incomplete excision, but do not show metastatic spread.
- **Bowenoid in situ carcinoma** is an uncommon papilloma virus induced skin lesion

presenting as multifocal crusted and verrucous lesions in both sun-exposed and non-exposed areas of the skin. Although these lesions tend to remain localized and are not reported to metastasize, up to 17% are reported to progress to invasive squamous cell carcinoma (and rarely to basal cell carcinoma).



**Invasive squamous cell carcinoma.**

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**Canine** infections with papilloma viruses usually manifests in typical viral warts. Lesions arise on the mucous membranes and on haired skin and are frequently single lesions with an exophytic cauliflower-like growth pattern. It appears as if the virus causing mucosal lesions is distinct from those causing lesions on haired skin.



Typical canine warts may be single or multiple with rare cases showing severe proliferative lesions that may impede swallowing and even obstruct airways. Most of the lesions are small, localized and have a benign behaviour. Most are seen in dogs less than 2 years of age and some may be encountered in animals that are immunosuppressed.

Squamous papillomas have been rare in the canine population over the last decade with only rare cases being diagnosed each year. However, in recent times the number of diagnoses has escalated and these lesions are once again becoming more common. Whether this is due to

a new virus emerging or due to the dogs being naïve and unprotected is uncertain.

Canine papillomas may undergo spontaneous regression over a period of weeks and months. Localised lesions are readily cured with excision.

## LOCKED BOXES FOR OVERNIGHT SAMPLE COLLECTION

Vetpath maintains locked boxes at a number of strategic locations throughout the Perth metropolitan area. Samples can be left in these secure containers and are collected by a night courier service and delivered to Vetpath for processing early the next working day. Access to the box is limited to those with the appropriate key (we have sent these out to all metro practices).

If you do leave a sample in a locked box, please contact Vetpath reception on 9259 3600 so we can ensure all samples are collected overnight.

Locked boxes can be found outside the following veterinary practices:

- \*Balcatta Veterinary Hospital
- \*Bullcreek Veterinary Hospital
- \*Cottesloe Animal Hospital
- \*East Fremantle Veterinary Clinic
- \*Joondalup Central Veterinary Hospital
- \*Larkhill Vets
- \*Melville Animal Hospital
- \*Midland Veterinary Hospital
- \*Morley Vetcentre
- \*Ranford Veterinary Hospital

- \*Subiaco Veterinary Clinic
- \*Vetwest Animal Hospital-Whitfords.

## CONTACTING VETPATH BY EMAIL

Almost all Vetpath clients receive their laboratory results via email. These results are now being sent from a centralized server in an effort to provide a more reliable service. It is important to note that if you want to request additional tests to those in the emailed report, please phone Vetpath rather than merely hitting the reply button on the email. It may be that the reply will reach the inbox of an off-duty pathologist or scientist and we may not get your request for a day or longer.

To ensure a prompt response to your request please call reception on 08 9259 3600 or send an email to [enquiries@vetpath.com.au](mailto:enquiries@vetpath.com.au)



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